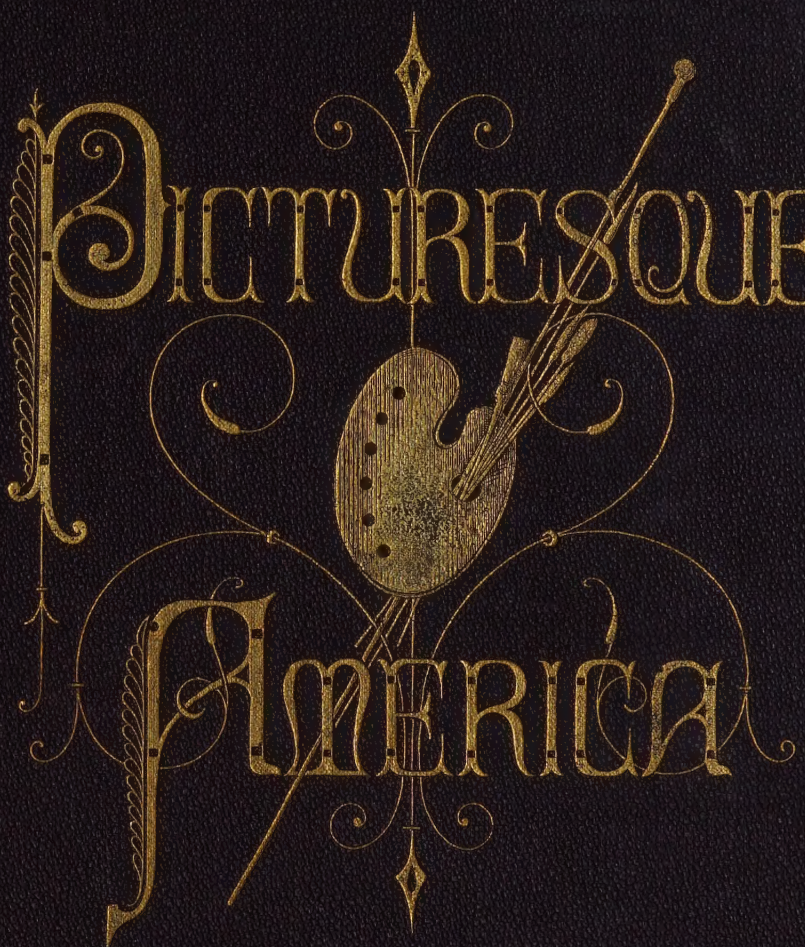
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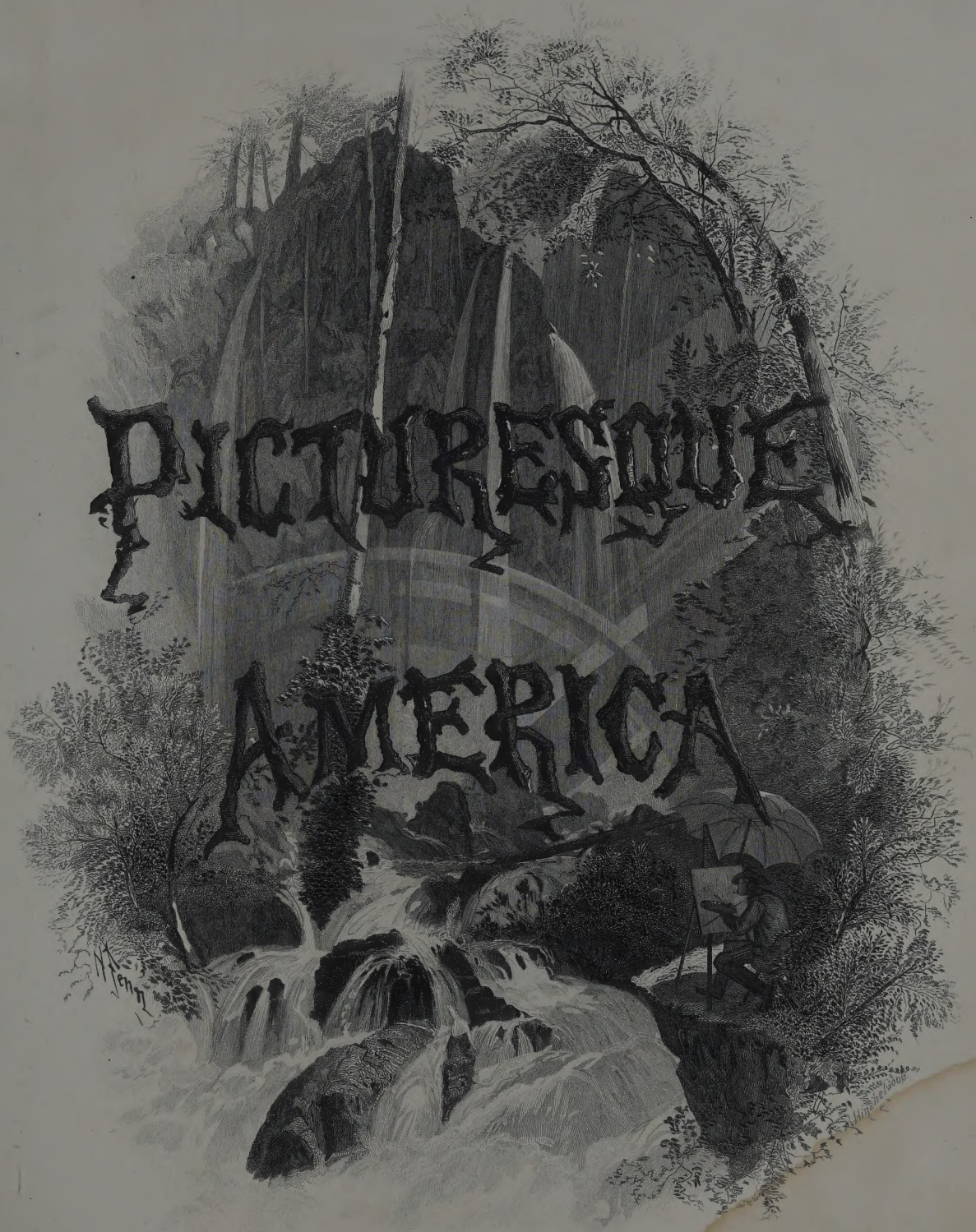

NEW YORK.
D. APPLETON & CO. PUBLISHERS.

PICTURESQUE AMERICA;

OR,

THE LAND WE LIVE IN.

A DELINEATION BY PEN AND PENCIL

OF

THE MOUNTAINS, RIVERS, LAKES, FORESTS, WATER-FALLS, SHORES, CAÑONS, VALLEYS, CITIES, AND OTHER PICTURESQUE FEATURES OF OUR COUNTRY.

With Illustrations on Steel and Wood, by Eminent American Artists.

EDITED BY WILLIAM CULLEN BRYANT.

VOL. I.

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PREFACE.

IT is the design of the publication entitled "PICTURESQUE AMERICA" to present full descriptions and elaborate pictorial delineations of the scenery characteristic of all the different parts of our country. The wealth of material for this purpose is almost boundless.

It will be admitted that our country abounds with scenery new to the artist's pencil, of a varied character, whether beautiful or grand, or formed of those sharper but no less striking combinations of outline which belong to neither of these classes. In the Old World every spot remarkable in these respects has been visited by the artist; studied and sketched again and again; observed in sunshine and in the shade of clouds, and regarded from every point of view that may give variety to the delineation. Both those who see in a landscape only what it shows to common eyes, and those whose imagination, like that of Turner, transfigures and glorifies whatever they look at, have made of these places, for the most part, all that could be made of them, until a desire is felt for the elements of natural beauty in new combinations, and for regions not yet rifled of all that they can yield to the pencil. Art sighs to carry her conquests into new realms. On our continent, and within the limits of our Republic, she finds them—primitive forests, in which the huge trunks of a past generation of trees lie mouldering in the shade of their aged descendants; mountains and valleys, gorges and rivers, and tracts of sea-coast, which the foot of the artist has never trod; and glens murmuring with water-falls which his ear has never heard. Thousands of charming nooks are waiting to yield their beauty to the pencil of the first comer. On the two great oceans which border our league of States, and in the vast space between them, we find a variety of scenery which no other single country can boast of. In other parts of the globe are a few mountains which attain a greater altitude than any within our limits, but the mere difference in height adds nothing to the impression made on the spectator. Among our White Mountains, our Catskills, our Alleghanies, our Rocky Mountains, and our Sierra Nevada, we have some of the wildest and most beautiful scenery in the world. On our majestic rivers—among the largest on either continent—and on our lakes—the largest and noblest in the world—the country often wears an aspect in which beauty is blended with majesty; and on our prairies and savannas the spectator, surprised at the vastness of their features, finds himself, notwithstanding the soft and gentle sweep of their outlines, overpowered with a sense of sublimity.

By means of the overland communications lately opened between the Atlantic coast and that of the Pacific, we have now easy access to scenery of a most remarkable character. For those who would see Nature in her grandest forms of snow-clad mountain, deep valley, rocky pinnacle, precipice, and chasm, there is no longer any occasion to cross the ocean. A rapid journey by railway over the plains that stretch westward from the Mississippi, brings the tourist into a region of the Rocky Mountains rivalling Switzerland in its scenery of rock piled on rock, up to the region of the clouds. But Switzerland has no such groves on its mountain-sides, nor has even Libanus, with its ancient cedars, as those which raise the astonishment of the visitor to that Western region—trees of such prodigious height and enormous dimenmensions that, to attain their present bulk, we might imagine them to have sprouted from the seed at the time of the Trojan War. Another feature of that region is so remarkable as to have enriched our language with a new word; and *cañon*, as the Spaniards write it, or *canyon*, as it is often spelled by our people,

signifies one of those chasms between perpendicular walls of rock—chasms of fearful depth and of length like that of a river, reporting of some mighty convulsion of Nature in ages that have left no record save in these displacements of the crust of our globe. Nor should we overlook in this enumeration the scenery of the desert, as it is seen in all its dreariness, not without offering subjects for the pencil, in those tracts of our Western possessions where rains never fall nor springs gush to moisten the soil.

When we speak of the scenery in our country rivalling that of Switzerland, we do not mean to imply that it has not a distinct and peculiar aspect. In mountain-scenery Nature does not repeat herself any more than in the human countenance. The traveller among the Pyrenees sees at a glance that he is not among the Alps. There is something in the forms and tints by which he is surrounded, and even in the lights which fall upon them, that impresses him with the idea of an essential difference. So, when he journeys among the steeps, and gorges, and fountains of Lebanon and Anti-Lebanon, he well perceives that he is neither among the Alps nor the Pyrenees. The precipices wear outlines of their own, the soil has its peculiar vegetation, the clouds and the sky have their distinct physiognomy.

Here, then, is a field for the artist almost without limits. It is no wonder that, with such an abundance and diversity of subjects for the pencil of the landscape-painter, his art should flourish in our country, and that some of those by whom it is practised should have made themselves illustrious by their works. Amid this great variety, however, and in a territory of such great extent, parts of which are but newly explored and other parts yet unvisited by sketchers, it is certain that no country has within its borders so many beautiful spots altogether unfamiliar to its own people. It is quite safe to assert that a book of American scenery, like "PICTURESQUE AMERICA," will lay before American readers more scenes entirely new to them than a similar book on Europe. Paintings, engravings, and photographs, have made us all, even those who have never seen them, well acquainted with the banks of the Hudson, with Niagara, and with the wonderful valley of the Yosemite; but there are innumerable places which lie out of the usual path of our artists and tourists; and many strange, picturesque, and charming scenes, sought out in these secluded spots, will, for the first time, become familiar to the general public through these pages. It is the purpose of the work to illustrate with greater fulness, and with superior excellence, so far as art is concerned, the places which attract curiosity by their interesting associations, and, at the same time, to challenge the admiration of the public for many of the glorious scenes which lie in the by-ways of travel.

Nor is the plan of the work confined to the natural beauties of our country. It includes, moreover, the various aspects impressed on it by civilization. It will give views of our cities and towns, characteristic scenes of human activity on our rivers and lakes, and will often associate, with the places delineated, whatever of American life and habits may possess the picturesque element.

The descriptions which form the letter-press of this work are necessarily from different pens, since they were to be obtained from those who had personally some knowledge of the places described. As for the illustrations, they were made in almost every instance by artists sent by the publishers for the purpose. Photographs, however accurate, lack the spirit and personal quality which the accomplished painter or draughtsman infuses into his work. The engravings here presented may with reason claim for "PICTURESQUE AMERICA," in addition to the fidelity of the delineations, that they possess spirit, animation, and beauty, which give to the work of the artist a value higher than could be derived from mere topographical accuracy.

The letter-press has passed under my revision, but to the zeal and diligence of Mr. Oliver B. Bunce, who has made the getting up of this work a labor of love, the credit of obtaining the descriptions from different quarters is due. To his well-instructed taste also the public will owe what constitutes the principal value of the work, the selection of subjects, the employment of skilful artists, and the general arrangement of the contents.

WILLIAM CULLEN BRYANT.

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PICTURESQUE AMERICA.

Castle Head, Mount Desert.

ON THE COAST OF MAINE.

WITH ILLUSTRATIONS BY HARRY FENN.

THE island of Mount Desert, on the coast of Maine, unites a striking group of picturesque features. It is surrounded by seas, crowned with mountains, and embosomed with lakes. Its shores are bold and rocky cliffs, upon which the breakers for countless centuries have wrought their ceaseless attrition. It affords the only instance along our Atlantic coast where mountains stand in close neighborhood to the sea; here in one picture are

beetling cliffs with the roar of restless breakers, far stretches of bay dotted with green islands, placid mountain-lakes mirroring the mountain-precipices that tower above them, rugged gorges clothed with primitive forests, and sheltered coves where the sea-waves ripple on the shelly beach. Upon the shores are masses of cyclopean rocks heaped one upon another in titanic disorder, and strange caverns of marvellous beauty; on the mountains are frightful precipices, wonderful prospects of far-extending sea, and mazes of land and water, and magnificent forests of fir and spruce. It is a union of all these supreme fascinations of scenery, such as Nature, munificent as she is, rarely affords.

Mount Desert is situated one hundred and ten miles east of Portland, in Frenchman's Bay, which stretches on the eastern and western sides of the island in a wide expanse, but narrows at the upper or northern end, where a bridge establishes permanent connection with the main-land. The greatest length of the island is fourteen miles, and its extreme width eight, the area being a hundred square miles. Nearly midway it is pierced by an inlet of the sea known as Somes's Sound, which is seven miles in length. It includes three townships, Tremont, Mount Desert, and Eden, and possesses several harbors, the best known of which are Southwest, Northeast, and Bar Harbor. The latter is on the eastern shore, opposite the Porcupine Islands, and derives its name from a sandy bar, visible only at low water, which connects Mount Desert with the largest and northernmost of the Porcupine group. The village at this harbor is known by the name of East Eden, and here tourists and summer visitors principally abide. The mountains are upon the southern half of the island, and lie in seven ridges, running nearly north and south. There are thirteen distinct peaks, the highest of which is known as Green Mountain; and the next, which is separated from Green Mountain by a deep, narrow gorge, is called Newport. The western sides of the range slope gradually upward to the summits, but on the east all of them descend by steep precipices, four of them into lakes and one into Somes's Sound.

The best view of the mountains is from the sea. The steamer from Portland, which lands at Bar Harbor twice a week, approaches the island at noonday, when the landscape, under the direct rays of the sun, possesses the least charm. But no other situation affords so fine a command of the range, although, from this view, the rocks and cliffs of the shore, lying under the shadows of the mountains, appear to have but little magnitude or picturesque value. If it so chance, as it did with the writer, that delays bring the steamer along the coast when the sun is sinking behind the hills, a picture of singular beauty is presented. The mountains then lift in gloomy grandeur against the light of the western sky, and, with the movement of the steamer, break every moment into new combinations of rare beauty. Now they lie massed, one against another, in long, undulating lines, now open into distinct groups; now Green Mountain fronts the sea with all its stern majesty, now Newport rises apparently from the very water's edge in one abrupt cliff a thousand feet in height. It is a dissolving view that for an hour or more presents a superb succession of scenic effects, which the spectator watches with entrancing interest, until he discovers the steamer gliding by green

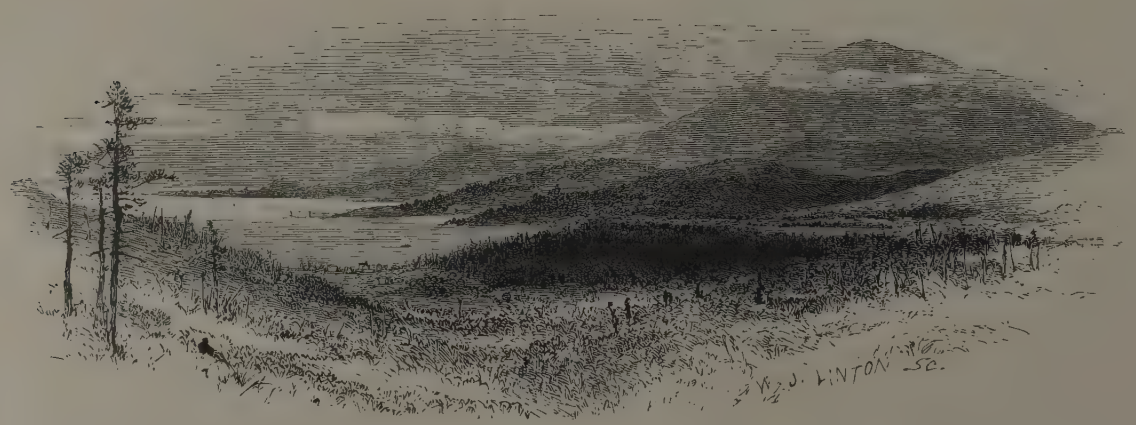
The Porcupine Islands, Frenchman's Bay.

islands and amid fleets of gayly-bannered yachts on its approach to the shore. The village of East Eden, while possessing a charming lookout over the bay, is without one feature of beauty. It is built upon a treeless plain, and consists for the most part of a group of small white houses, rapidly extemporized for the accommodation of summer boarders. Every structure, with the exception of a few cottages erected by wealthy gentlemen of Boston, stands without trees, garden, or other pleasant surroundings. The place is as conspicuously inexact in its cognomen as the island itself is; one wonders whether the notion of naming places by their contraries is a legitimate Down-East institution. In regard to the name of the island, an attempt is made to escape the inconsistency of the appellation by shifting the accent from the first to the last syllable. The primary meaning of the designation, however, requires the accentuation on the first syllable. It was named by the French, who were the discoverers of this coast, "Mont Désert," as expressive of the wild and savage aspects of the mountains and cliffs that front the sea.

Two purposes of special interest fill the mind of the visitor as soon as he finds himself satisfactorily domiciled at East Eden. One is, to explore the long series of rocks and cliffs on the shore; the other, to ascend Green Mountain, and enjoy the superb view from its "thunder-smitten brow." These respects to the scenery of the island having been paid, his subsequent purpose is likely to be fishing and boating. He will be anxious to try his hand at the

splendid trout with which the lakes are said to abound, and to go far down the bay for catches of cod and haddock, which here are of large dimensions and in great abundance. The bays, inlets, and sounds of the coast of Maine afford superb resources for the yachtman. The coast seems to have crumbled off from the main-land in innumerable islands, large and small, so that there is a vast area of inland-sea navigation, which, with infinite variety of scene, gives ample space for boating. A yachting-party might spend a summer delightfully in threading the mazes of this "hundred-harbored Maine," as Whittier describes it. Abandoning the pleasant vision of such a summer, let us for the present remember that our special object is to visit and depict the scenery of Mount Desert.

The several points along the coast to which the visitor's attention is directed are the cliffs known as "The Ovens," which lie some six or seven miles up the bay; and "Schooner



View of Mount-Desert Mountains from Saulsbury-Cove Road.

Head," "Great Head," and "Otter-Creek Cliffs," lying on the seaward shores of the island. It will fall more duly in order to proceed first to "The Ovens," which may be reached by boat or by a pleasant drive of seven or eight miles.

With a one-armed veteran for an escort, Mr. Fenn and the writer set forth for a scene where we were promised many charming characteristics for pen and pencil. It was necessary to time our visit to "The Ovens"—the nomenclature of Mount Desert is painfully out of harmony with the scenes it verbally libels—so as to reach the beach at low tide. The cliffs can be approached only by boat at high tide, and the picture at this juncture loses some of its pleasing features.

The Mount-Desert roads for the most part are in good condition, and have many attractions. The forests are crowded with evergreens, and the firs and the spruce-trees marshal in such array on the hill-sides that, with their slender, spear-like tops, they look like armies of lancers. The landscape borrows from these evergreens an Alpine tone, which

THE CLIFFS NEAR "THE OVENS."

groups of pedestrians for the mountains, armed with alpenstocks, notably enhance. The fir, spruce, pine, and arbor-vitæ, attain splendid proportions; the slender larch is in places also abundant, and a few sturdy hemlocks now and then vary the picture. The forest-scenes are, many of them, of singular beauty, and in our long drives about the island we discovered many a strongly-marked forest-group.

At one point on our drive to "The Ovens," the road, as it ascends a hill near Saulsbury Cove, commands a fine, distant view of the mountains, which Mr. Fenn rapidly sketched. Clouds of fog were drifting along their tops, now obscuring and now revealing them, and adding often a vagueness and mystery to their forms which lent them an additional charm.

The cliffs at "The Ovens" contrast happily with the rocks on the sea-front of the island in possessing a delicious quiet and repose. The waters ripple calmly at their feet, and only when winds are high do the waves chafe and fret at the rocks. Here the perpendicular pile of rock is crowned by growths of trees that ascend in exact line with the wall, casting their shadows on the beach below. Grass and flowers overhang the edge; at points in the wall of rock, tufts of grass and nodding harebells grow, forming pleasant pictures in contrast with the many-tinted rocks, in the crevices of which their roots have found nourishment. The whole effect of the scene here is one of delicious charm. The wide and sunny bay, the boats that glide softly and swiftly upon its surface, the peaceful shores, the cliff crowned with its green forest, make up a picture of great sweetness and beauty. "The Ovens" are cavities worn by the tides in the rock. Some are only slight excavations, such as those shown in Mr. Fenn's drawing, but a little northward of the spot are caves of a magnitude sufficient to hold thirty or forty people. The rocks are mainly of pink feldspar, but within the caves the sea has painted them in various tints of rare beauty, such as would delight the eye and tax the skill and patience of a painter to reproduce. The shores here, indeed, supply almost exhaustless material for the sketch-book of the artist.

To this spot, at hours when the tide permits, pleasure-seekers come in great numbers. It is a favorite picnic-ground for the summer residents at East Eden, whose graceful pleasure-boats give animation to the picture. The visitors picnic in the caves, pass through the archway of a projecting cliff, which some designate as "Via Mala," wander through the forests that crown the cliffs, pluck the wild-roses and harebells that overhang the precipice, and roam up and down the beach in search of the strange creatures of the sea that on these rocky shores abound. Star-fishes, anemones, sea-urchins, and other strange and beautiful forms of marine life, make grand aquaria of the caves all along the coast, and add a marked relish to the enjoyment of the explorer.

From the quiet beauty of "The Ovens" to the turbulence of the seaward shore there is a notable change. Our next point visited was "Schooner Head," which lies four or five miles southward from East Eden, and looks out on the wide Atlantic. "Schooner Head" is so named from the fancy that a mass of white rock on its sea-face, viewed at the proper distance,

has the appearance of a small schooner. There is a tradition that, in the War of 1812, a British frigate sailing by ran in and fired upon it, under the impression that it was an American vessel hugging the shore. "Schooner Head" derives its principal interest from the "Spouting Horn," a wide chasm in the cliff, which extends down to the water and opens to the sea through a small archway below high-water mark. At low water the arch may be

Great Head.

reached over the slippery, weed-covered rocks, and the chasm within ascended by means of uncertain footholds in the sides of the rocky wall. A few adventurous tourists have accomplished this feat, but it is a very dangerous one. If the foot should slip on the smooth, briny rock, and the adventurer glide into the water, escape would be almost impossible. The waves would suck him down into their depths—now toss him upon rocks, whose slippery surface would resist every attempt to grasp, then drag him back into their foaming embrace. When

the tide comes in, the breakers dash with great violence through the archway described, and hurl themselves with resounding thunder against the wall beyond, sending their spray far up the sides of the chasm. But, when a storm prevails, then the scene is one of extreme grandeur. The breakers hurl themselves with such wild fury through the cavernous opening against the walls of rock, that their spray is hurled a hundred feet above the opening at the top of the cliff, as if a vast geyser were extemporized on the shore. The scene is inspiriting and terrible. Visitors to Mount Desert but half understand or appreciate its wonders if they do not visit the cliffs in a storm. On the softest summer day the angry but subdued roar with which the breakers ceaselessly assault the rocks gives a vague intimation of what their fury is when the gale lashes them into tumult. At such times they hurl themselves against the cliffs with a violence that threatens to beat down the rocky barriers and submerge the land; their spray deluges the abutments to their very tops, and the thunder of their angry crash against the rock may be heard for miles. But at other times the ceaseless war they make upon the shore seems to be one of defeat. The waves come in full, sweeping charge upon the rocks, but hastily fall back, broken and discomfited, giving place to fresh and hopeful levies, who repeat the first assault, and, like their predecessors, are hurled back defeated. The war is endless, and yet by slow degrees the sea gains upon its grim and silent enemy. It undermines, it makes channels, it gnaws caverns, it eats out chasms, it wears away little by little the surface of the stone, it summons the aid of frost and of heat to dislodge and pull down great fragments of the masonry, it grinds into sand, it gashes with scars, and it will never rest until it has dragged down the opposing walls into its depths.

"Great Head," two miles southward of "Schooner Head," is considered the highest headland on the island. It is a bold, projecting mass, with at its base deep gashes worn by the waves. A view of its grim, massive front is obtained by descending a broken mass of cyclopean rocks a little below the cliff, where at low tide, on the sea-washed bowlders, the cliff towers above you in a majestic mass.

People in search of the picturesque should understand the importance of selecting suitable points of view. The beauty or impressiveness of a picture sometimes greatly depends on this. It is often a matter of search to discover the point from which an object has its best expression; and probably only those of intuitive artistic tastes are enabled to see all the beauties of a landscape, which others lose in ignorance of how to select the most advantageous standing-place. To the cold and indifferent, Nature has no charms; she reveals herself only to those who surrender their hearts to her influence, and who patiently study her aspects. The beauty of any object lies partly in the capacity of the spectator to see it, and partly in his ability to put himself where the form and color impress the senses most effectively. Not one man in ten discerns half the beauty of a tree or of a pile of rocks, and hence those who fail to discover in a landscape the charm others describe in it, should question their own power of appreciation rather than the accuracy of the delineation. The shores of Mount Desert must be studied with this appreciation and taste, if their beauties

THE "SPOUTING HORN" IN A STORM.

are to be understood. No indifferent half glance will suffice. Go to the edge of the cliffs and look down; go below, where they lift in tall escarpments above you; sit in the shadows of their massive presence; study the infinite variety of form, texture, and color, and learn to read all the different phases of sentiment their scarred fronts have to express. When all this is done, be assured you will discover that "sermons in stones" was not a mere fancy of the poet.

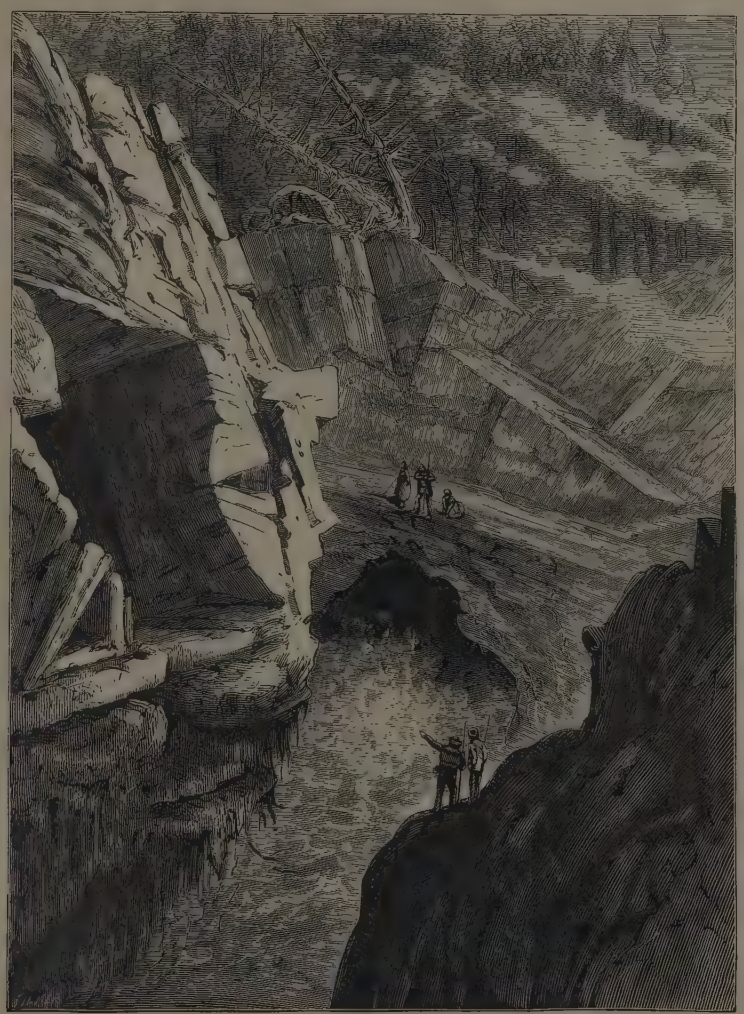
One of the characteristics of Mount Desert is the abundance of fog. In July and August especially it seriously interferes with the pleasure of the tourist. It often happens that, for several days in succession, mountain, headland, and sea, are wrapped in an impenetrable mist, and all the charms of the landscape obscured. But the fog has frequently a grace and charm of its own. There are days when it lies in impenetrable banks far out at sea, with occasional incursions upon the shore that are full of interest. At one hour the sun is shining, when all at once the mist may be discerned creeping in over the surface of the water, ascending in rapid drifts the sides of the mountains, enveloping one by one the islands of the bay, until the whole landscape is blotted from view. In another hour it is broken; the mountains pierce the shadowy veil, the islands reappear in the bay, and the landscape glows once more in the sunshine. It is a rare pleasure to sit on the rocky headlands, on the seaward side of the island, on a day when the fog and sun contend for supremacy, and watch the pictures that the fog makes and unmakes. Sometimes the fog skirts along the base of the islands in the bay, leaving a long, slender line of tree-tops painted against the blue ether, looking like forests hung in the sky. Then a vessel may be seen sailing through a fog-bank, now looking like a shadowy ghost floating through the mist, when suddenly its topsails flash in the light, like the white wings of a huge bird. In another moment the fog shifts, and the under edge of the mainsail may be traced in a line of silver, while all the rest of the vessel is in the deepest shadow. Now one sail glitters a brilliant white, and the fog envelops all the rest of the vessel. The pictures thus formed vary like a succession of dissolving views, and often produce the most striking and unique effects. Sometimes there is the marvellous exhibition of a mirage, when fleets appear sailing through the air, and, as described by Whittier—

> "Sometimes, in calms of closing day,
> They watched the spectral mirage play;
> Saw low, far islands, looming tall and high,
> And ships, with upturned keels, sail like a sea the sky."

The fog-pictures at Mount Desert are by no means the least interesting feature of this strange shore.

Near a small stream, known as "Otter Creek," deriving its name from the otter which once abounded there, are a succession of cliffs, which possess characteristics quite distinct from those already described. They are more remote from the village than "Schooner

Head" or "Great Head," but the drive to them derives great interest from the wild and narrow notch between Green and Newport Mountains, through which the road lies for a mile or two. The sides of the mountains are high, precipitous, and savagely rugged. The lower base of each is covered with a thick and tangled forest-growth; half-way up, a few gnarled and fantastic growths struggle for place amid the scarred and frowning rocks,



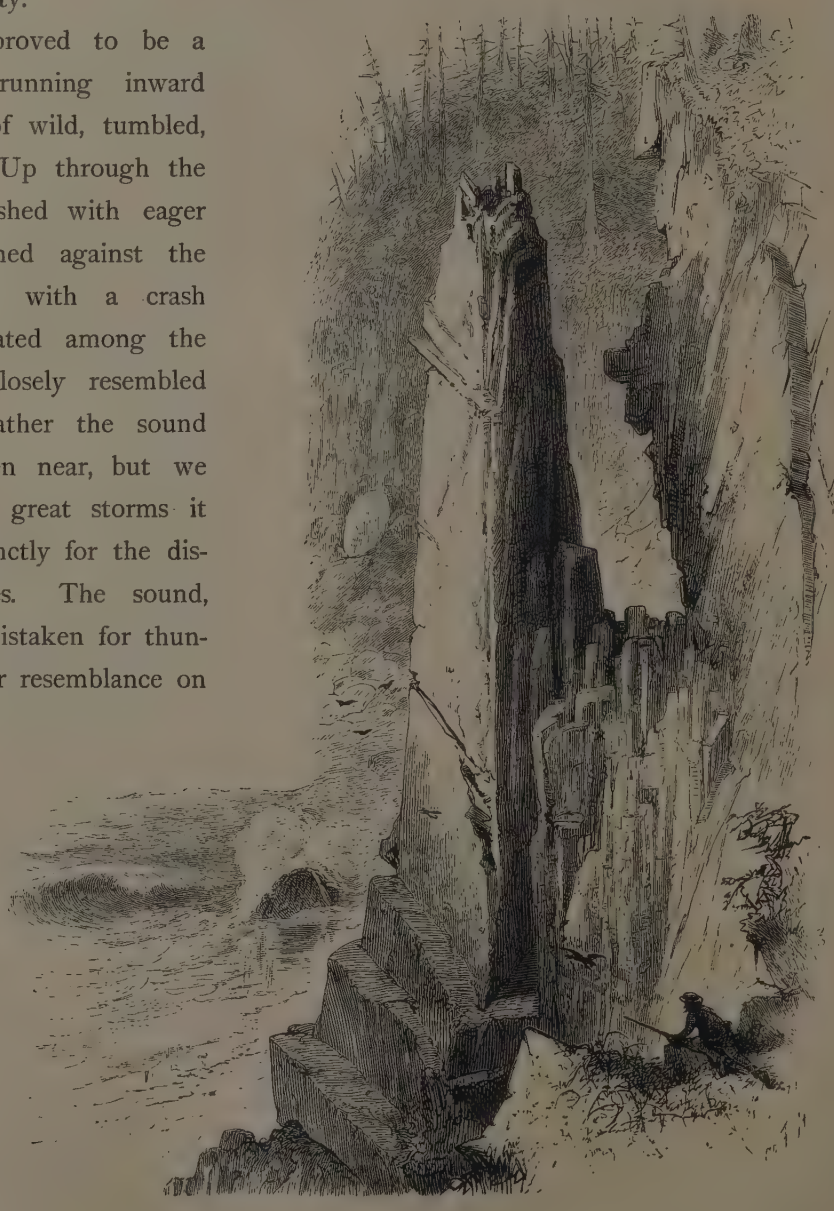
Thunder Cave.

while the upper heights show only the bare, seamed, and riven escarpments. It is a wild picture, inferior, no doubt, to the famous Notch of the White Mountains, but possessing, notwithstanding, very strong and impressive features.

At "Otter-Creek Cliffs" we set out in search of what is known as "Thunder Cave." After leaving our vehicle, we had a long but superb forest-walk to reach it. There are numerous fine birches on Mount Desert, and more than once we saw groups of these trees

that would have filled any artist with delight, and especially the painter Whittredge, whose birch-forests are so famous. Near Great Head are numerous splendid specimens of this tree, whose bark, of yellow, Indian red, and gray, afforded delicious contrasts of color. On the path to Thunder Cave we noted one forest-picture that comes vividly back to memory. The trees were mostly evergreen, and the surface of the ground covered with outcropping rocks and tangled roots, all richly covered with mosses. The broken light through the dark branches, the tint of the fallen pine-leaves, the many-colored mosses which painted every rock in infinite variety of hue, the low, green branches of the fir and the spruce, all made up a picture of ripe and singular beauty.

Thunder Cave proved to be a long, low gallery, running inward amid a great mass of wild, tumbled, and distorted rocks. Up through the gallery the waves rushed with eager impetuosity, and dashed against the hollow cavity within with a crash which, as it reverberated among the overhanging rocks, closely resembled thunder. In fair weather the sound is apparent only when near, but we were assured that in great storms it had been heard distinctly for the distance of seven miles. The sound, which might well be mistaken for thunder, has all the greater resemblance on account of a peculiarity which Mr. Fenn detected while making his sketch. Piled up within the cave at the end of the gallery are a great number of large stones, varying from one to probably three feet in length,



The Obelisk.

and of corresponding thickness. Every time the waves dash into the cave, they dislodge some of these stones, sometimes dragging them back, sometimes lifting them up and tossing them against the sides of the cavity, and, as these bowlders thus roll and grind together, they produce in the hollow of the cavern almost the exact mutterings and reverberations of thunder. The crash of the breakers against the wall is the clap of thunder; the rolling stones carry off the sound in its successive reverberations, making the resemblance complete.

Near Thunder Cave we discovered a natural obelisk. The woodland path at one point reaches the edge of a wide, precipitous break in the cliff. Forcing our way through tangled wood-growth to obtain a view of the cliff, we saw, situated directly under the bank, where the tourist ordinarily would not detect it, a tall, pointed column, with an apparently artificial base of steps, bearing a close semblance to a monument of stone. This singular freak of Nature the reader will find illustrated by Mr. Fenn's pencil.

Returning to our point of departure, we proceeded westward in search of other cliffs, where we made another discovery. The path lay along the top of the cliff, but, coming to a dislodgement of the perpendicular wall, where some convulsion had thrown down the cliff into a wild mass of rocks, we with no little difficulty clambered down the broken and jagged pile, with the purpose of getting from below a view of the cliffs. Fortunately, the tide was low; and this, the tourist should remember, is necessary, when he arranges his visits to the shores of Mount Desert. There is more animation when the tide is coming in, but high water cuts off access to many interesting points. Reaching a wet, barnacle-covered, projecting line of rocks, a picture presented itself that filled both artist and penman with surprise. "Why, this is an old Norman castle!" was our exclamation. The cliff, a little distant from our point of view, stood up in perpendicular lines of rock that assumed almost exactly the form of battlements. The upper line closely resembled the parapet of a castle-wall; there were in the sides deep embrasures; and the whole front had the aspect of a dark, broken, time-stained wall reared by the hand of man. It stood in grim and gloomy grandeur, fronting the sea in stern defiance of the world beyond. The waves chafed at its feet; wild sea-birds hovered about its crest; there was an air of neglect and desolation, as if it were an old ruin, and we found it impossible to dissociate the grim and frowning walls from the historic piles that look darkly down upon so many European landscapes. Finding afterward that the cliff was known by no name, we called it "Castle Head." The path followed by the customary visitor extends along the cliff above this strange pile, and hence its peculiarities escape the notice of all except those who boldly clamber down the broken wall just before it is reached, and survey it from the water's edge. The illustration of this striking scene is at the beginning of our article.

The interest of Mount Desert, as we have already said, is divided between its sea-cliffs and its mountain-views. It is customary for pedestrian parties to form at East

Eden and walk to the mountain-top, and there remain overnight, in order to view the sunrise from this altitude. A cottage, originally built by the United States Coast Survey, stands on the extreme top of the mountain, and affords satisfactory accommodation for the tourists. A rude mountain-road, constructed by the Survey, enables vehicles to ascend to the cottage; but pleasure-parties commonly prefer the ascent on foot. The distance from the village is four miles. The height of the mountain is seventeen hundred and sixty-two feet.

The sunrise is a magnificent picture, but the prevalence of fogs is a continual cause of disappointment to people, who travel far and rise early often only to behold a sea of impenetrable mist. The prospect, however, whenever the fog permits it, is a splendid one at all hours, and possesses a variety and character quite distinct from the views usually obtained from mountain-heights. Here there is not only a superb panorama of

Eagle Lake.

hills and vales, but a grand stretch of sea, and intricate net-works of bay and islands which make up a picture marvellously varied both in form and color.

One of the most delightful features of the scene thus presented are the mountain-lakes that hang like superb mirrors midway in the scene. "Eagle Lake," so named by Church the artist, is visible at intervals during the entire ascent of the mountain, and at every point of view is beautiful. Half-way up, a short *détour* from the road will bring the tourist to its pebbly shore, where he may spend an hour or more watching its clear, mountain-encircled waters, or devote his entire day in pursuit of the trout with which it abounds. The largest lake in the island is on the western side of Somes's Sound, and is about four miles in length. There is a group of three lakes on each side of this sound, although to some of them the more prosaic designation of pond is applied.

Somes's Sound, which divides the lower portion of the island into two distinct portions, possesses many attractions for those who admire bold headlands. It bears a resem-

blance both to the shores of the Hudson and the Delaware Water-Gap. It is usual to ascend the sound in boats from Southwest Harbor; but explorers from East Eden sometimes drive to Somesville, at the head of the sound, a distance of nine miles, and there take boats for a sail down the stream. The sound cuts through the centre of the mountain-range at right angles, between Dog Mountain and an elevation on the eastern side, to which the appellation of "Mount Mansell" has been given, in honor of Sir Robert

Eagle Cliff, Somes's Sound.

Mansèll, after whom the island was at one time named by the English. Dog Mountain rises abruptly from the water's edge, and one of its cliffs, which is some eight hundred or a thousand feet in height, is called "Eagle Cliff." At the moment Mr. Fenn was sketching, a splendid bald-headed eagle was sailing in wide circles around the head of the cliff, thus giving, to the imagination of the artist, ample justification for the title.

We have now enumerated the principal features of this beautiful island. But there are hundreds of places that almost equally as well deserve the attention of pen and pen-

cil. The shore varies in character and form at nearly every step, affording almost innumerable delightful pictures; while the lakes, the mountains, the forests, are endless in their long catalogue of rare and beautiful scenes. And in addition to scenes upon the island itself are the picturesque and rocky Porcupine Islands, the rugged shores of Iron-bound Island, on the Eastern side of Frenchman's Bay, and Mount-Desert Rock, fifteen miles down at sea, upon whose narrow base stands a light-house. Artist and writer have been limited to giving mere indications of a locality that is almost exhaustless in its variety of scenery.

Mount Desert was discovered by the French, under Champlain, in the early part of the seventeenth century, who gave it the name by which it is now known. In 1619, the French formed a settlement, which was named "Saint-Sauveur," but in a few years it came to a cruel end. The Virginian settlers were accustomed to fish upon the New-England coast, and the captain of an armed vessel, hearing from the Indians of the settlement, sailed down upon it, and with a single broadside made himself its master. Some of the settlers were killed, and others carried away into captivity. The first permanent settlement was made by Abraham Somes, who in 1761 built a house at the head of the sound which now bears his name.

View from Via Mala, at The Ovens.

Mouth of the St. John's River—Looking in.

ST. JOHN'S AND OCKLAWAHA RIVERS, FLORIDA.

WITH ILLUSTRATIONS BY HARRY FENN.

FLORIDA is a strange land, both in its traditions and its natural features. It was the first settled of the States, and has the most genial climate of all of them; and yet the greater part of it is still a wilderness. Its early history was one long romance of battle and massacre, and its later annals are almost equally interesting. The Spaniards, who were the first Christian people to visit it, were much impressed with its mystery and its scenery, and, as they discovered it on Easter Sunday, which in their language is called "Pascua Florida," they commemorated the event by giving the new territory its present appellation.

The time was when Florida was an immense sand-bar, stretching into the Gulf of Mexico, and probably as barren as can be conceived. But in the semi-tropical climate under which it exists, in the course of ages the seeds carried to its shores by the sea and the winds and the myriads of birds which find it a resting-place, have clothed it with luxuriant vegetation, interspersed with tracts of apparently barren sands. It is a land of peculiar scenery, which the pencil of the artist has heretofore scarcely touched. Its main features illustrate the absurdity of the common notion that the landscapes of tropical and semi-tropical latitudes are superior in luxuriance of vegetable production to those of the temperate zones. The truth is, that in the hot regions it is only where there is constant moisture that there is a strong and rank growth of plants. Generally, aridity prevails, the hill-sides are bereft of vegetation, and an air of parched-up and suffering Nature characterizes all that is seen. It is only when we come North that our landscapes glow with universal vegetable profusion; that the forests stand out in bold relief on the hill-sides; that the earth is carpeted with vernal green, and prodigality of vegetation reigns supreme. In the tropical landscape, the abundance of flowers, which are supposed to be peculiar to

Mouth of the St. John's River—Looking out.

warm climates, are exceptional phases. They exist, but it is in the recesses of the swamp, where the burning sun is checked in its effulgency. In these recesses, and favored by springs of water, we have in Florida the wildest effects. We have flowers, and vines, and strange leafings, and gigantic trees, as nowhere else to be seen; but they are always in hidden places; the open tropical landscape, we repeat, is arid and desolate.

Originally starting out for the avowed purpose of hunting the picturesque, we sailed for the mouth of the St. John's—a river that reaches into the very heart of the peninsula, and from the ill-defined shores of which you can branch off into the very wildest of this, in one sense, desolate region. The approach of the mouth of the harbor, as is the case with all our Southern rivers, is interrupted by a bar, over which the surf beats always more or less wildly. Extra facilities being afforded us, we safely passed the "rough places," and with impatience sought a look-out from Pelican Bank, situated at the mouth of the harbor. Our sudden intrusion startled myriads of sea-fowl, which went screaming away, yet in such close contact to our persons that we could have caught many of them in

our hands. The scene had a strange look, for, as far as the eye could reach, a long, low reef of burning sand presented itself; the only vegetation visible was a jungle of sun-burnt, wind-blasted palmettos. A little north was Fort St. George Island, the most southern of the cultivated sea-islands. Once fairly launched on the waters of the St. John's, after making a sketch of the harbor looking toward the sea, we impatiently passed all intervening places until we arrived at Pilatka, a central point, from which we could easily reach the Black River, and the more famous Ocklawaha, and other small streams, only navigable for boats of miniature size.

But, before we enter upon the business of our journey, let us, by way of parenthesis, say that this section of country has always been remarkable for its recuperative effects upon invalids, who, living farther north, suffer from the borean blasts of our long and dreary winters. Jacksonville, a popular winter resort, is the most important of these hygienic towns, and boasts a population of over five thousand persons. There are also Hibernia, at the mouth of Black Creek, Magnolia, something over fifty miles from the mouth of the river, and Picolata, ten miles still farther up. If the time comes when these famous places for a winter residence for invalids can furnish abundantly the necessaries and comforts of life, there is no reason why they should not be annually crowded, for nothing can be better than their balmy air for those upon whom the Northern winters bear too heavily. But it is inconsiderate for those who are past recovery with pulmonary complaints to wander to the wilds of Florida in pursuit of health, for, whatever may be the advantages of climate, the lack of the comforts the sick require more than counterbalances the effect of the balmy air. Among the especial resorts for invalids is Green Cove Springs, near Magnolia, famous for curing rheumatism and a hundred complaints, and composed of a series of warm sulphurous pools, in some places twenty-five feet deep. The water is very transparent, and of a pale-bluish tint. It was perhaps some rumor of the virtues of these springs that gave origin to the notion, current among the early Spanish explorers, that there was in Florida a fountain, to bathe in which would insure perpetual youth and health.

At Pilatka, by the aid of influential letters and previously-made arrangements, we secured the good-will of the captain of the steamer we named the "Flying Swan," a craft which, from its simplicity of construction and rude machinery, might have been the first model constructed by Fulton when he was putting into practical shape the use of steam in propelling boats. Its general outline was that of an ill-shaped omnibus, with the propelling-wheel let into its rear, and, on further examination, we found the smoke-pipe, the engine, pilot-house, and all other of the usual gear of steamers, were housed, for the excellent reason of protecting them from being torn away by the overhanging limbs or protruding stumps everywhere to be met with in the narrow and difficult navigation of the swamps.

A sail of twenty miles along the St. John's brought us, a little before sunrise, to the

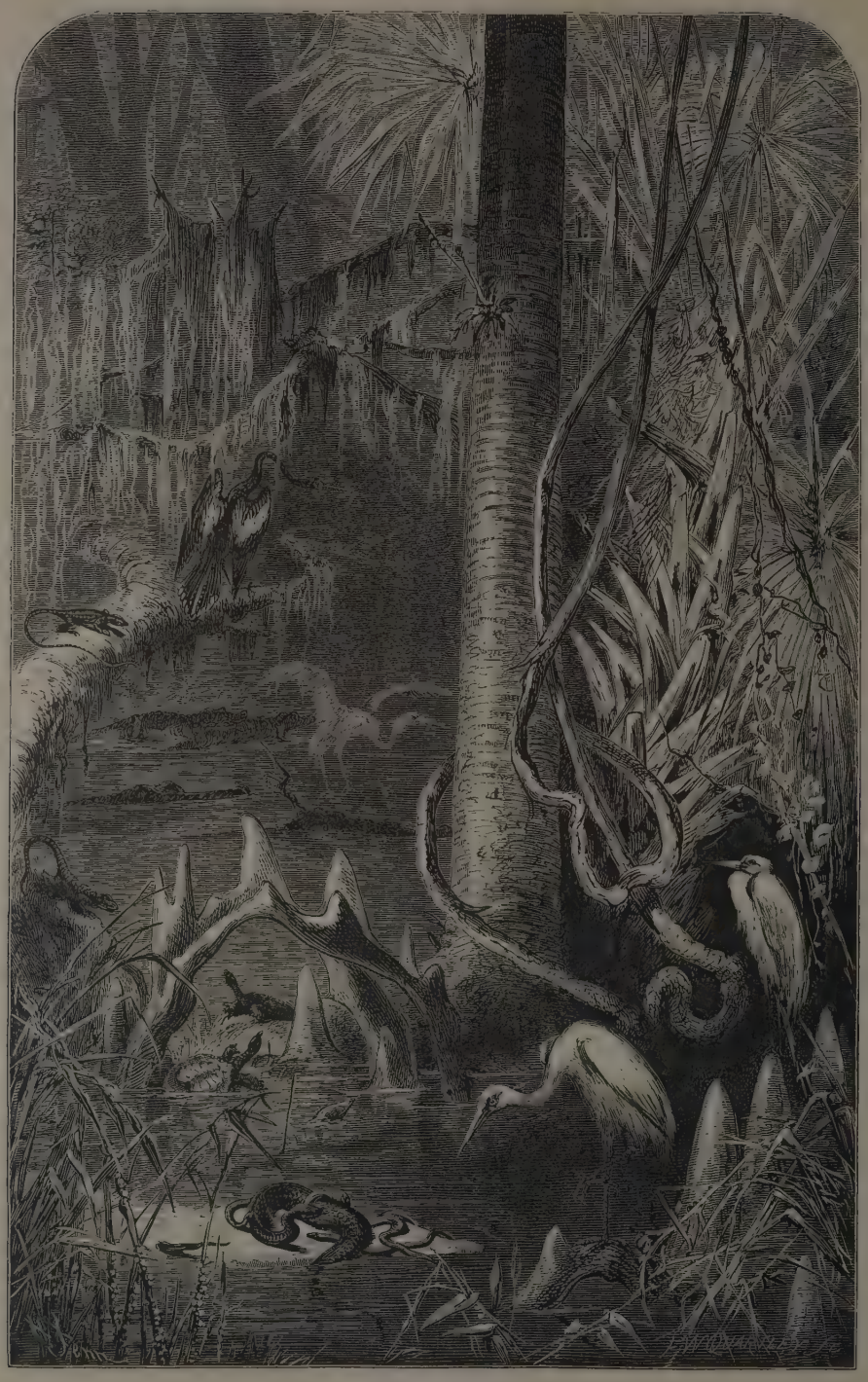
BAR LIGHT-HOUSE, MOUTH OF ST. JOHN'S RIVER.

mouth of the Ocklawaha River, looking scarcely wide enough to admit a skiff, much less a steamboat. As daylight increased, we found that we were passing through a dense cypress-swamp, and that the channel selected had no banks, but was indicated by "blazed" marks on the trunks of the towering trees. There was plenty of water, however, to float our craft, but it was a queer kind of navigation, for the hull of the steamer went bumping against one cypress-butt, then another, suggesting to the tyro in this kind of aquatic adventure that possibly he might be wrecked, and subjected, even if he escaped

Green Cove Springs.

a watery grave, to a miserable death, through the agency of mosquitoes, buzzards, and huge alligators.

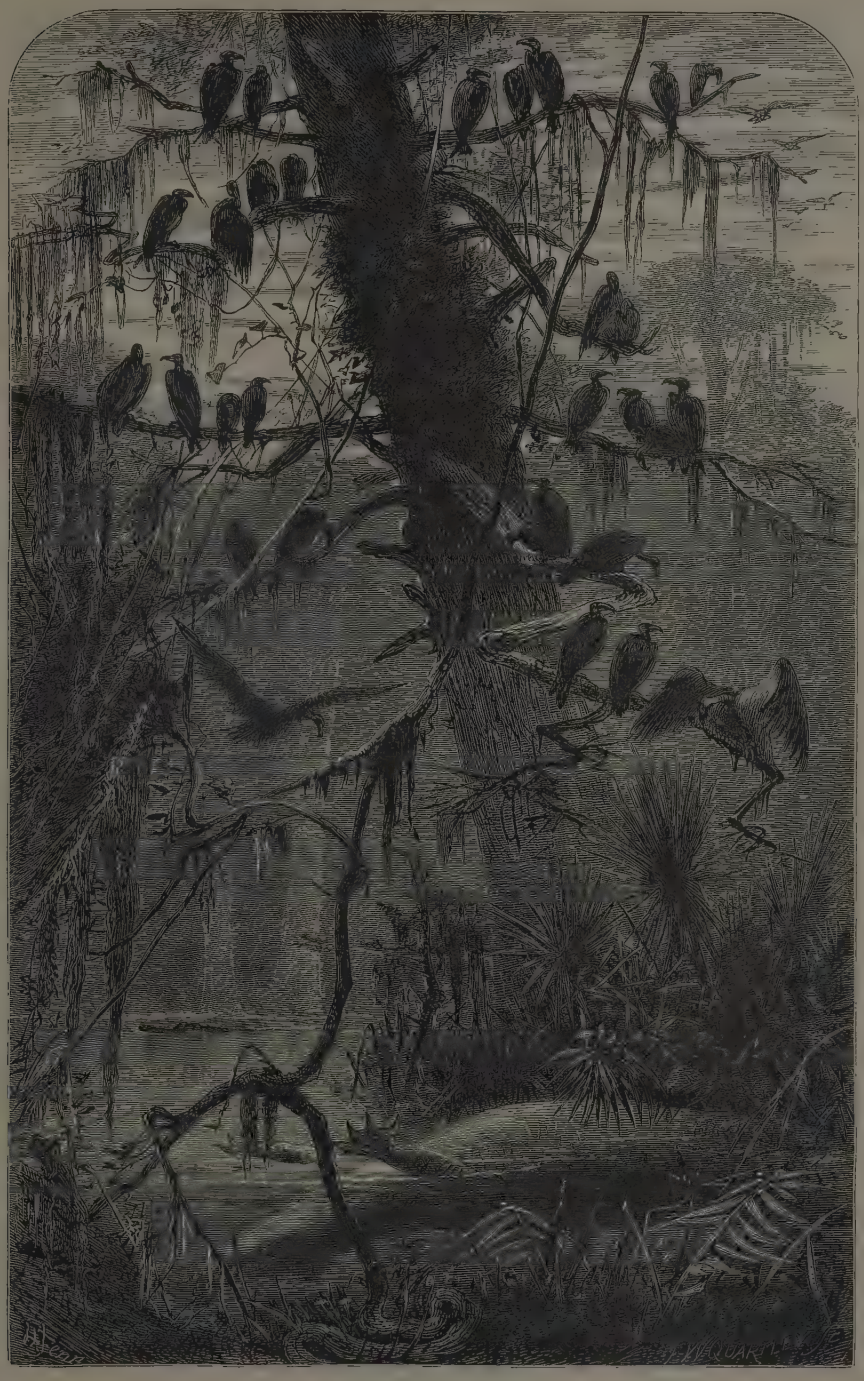
As we wound along through the dense vegetation, a picture of novel interest presented itself at every turn. We came occasionally to a spot a little elevated above the dead-water level, covered with a rank growth of lofty palmetto, the very opposite, in every respect, to those stunted, storm-blown specimens which greeted us at the mouth of the St. John's River. Here they shot up tall and slender, bearing aloft innumerable parasites



A Florida Swamp.

often surprising the eye with patches, of a half-mile in length, of the convolvulus, in a solid mass of beautiful blossoms.

Another sharp turn, and the wreck of an old dead cypress is discovered, its huge limbs covered with innumerable turkey-buzzards, which are waiting patiently for



Waiting for Decomposition.

the decomposition of an alligator that some successful sportsman has shot, and left for the prey of these useful but disgusting birds. The sunshine sparkles in the spray which our awkward yet efficient craft drives from its prow, and then we enter what seems to be a cavern, where the sun never penetrates. The tree-tops interlace

and the tangled vines and innumerable parasites have made an impenetrable mass overhead.

The swamps of Florida are as rich in birds as in vegetation. It is no wonder that Audubon here found one of the finest fields from which to enrich his great works of natural history. A minute list of the varieties we sometimes saw in a single day would fill a page. One of the most attractive was the water-turkey, or snake-bird, which was

Ascending the Ocklawaha River at Night.

everywhere to be met with, sitting upon some projecting limb overlooking the water, the body as carefully as possible concealed from view, its head and long neck projecting out, and moving constantly like a black snake in search of its prey. Your curiosity is excited; you would examine the creature more critically, and you fire, at what seems a short, point-blank shot. The bird falls, apparently helpless, in the water; you row rapidly to secure your prize, when, a hundred yards ahead, you suddenly see the snaky head

of the "darter," just protruding above the surface of the water. In an instant its lungs are filled with air, and, disappearing again, it reaches a place of safety.

Another conspicuous bird is the large white crane. It is a very effective object in the deep shadows of the cypress, as it proudly stalks about, eying with fantastic look the finny tribes it hunts for prey. Especially is it of service in seizing upon the young of the innumerable water-snakes which everywhere abound. With commendable taste, it seems to pay especial attention to the disgusting, slimy, juvenile moccasins, which have a taste for sunning themselves on harsh dried leaves of the stunted palmetto.

But the prominent living object to the stranger in these out-of-the way places is the alligator, whose paradise is in the swamps of Florida. Here he finds a climate that almost the year round suits his delicate constitution; and, while his kindred in the Louisiana swamps find it necessary to retire into the mud to escape the cold of winter, the Florida representative of the tribe is happy in the enjoyment of the upper world the year round. It was a comical and a provoking sight to see these creatures, when indisposed to get out of our way, turn up their piggish eyes in speculative mood at the sudden interruption of a rifle-ball against their mailed sides, but all the while seemingly unconscious that any harm against their persons was intended. Like Achilles, however, they possess a vulnerable point, which is just in front of the spot where the huge head works upon the spinal column. There is of necessity at this place a joint in the armor, and a successful hunter, after much experience, seldom lets one of the reptiles escape. If any philanthropist has ever objected to the slaughter, the circumstance is not remembered in the swamps and everglades of Florida. On one occasion we fired into a herd of alligators, and the noise of two or three shots caused all but one to finally disappear. For some reason it seemed difficult to get the remaining one to move, the creature lying with its head exposed to our gaze, looking as demoniac as possible. A bullet, which struck somewhere in the vicinity of its jaws, touched its feelings, and then, with a grunt not unlike that of a hog, it buried itself in the muddy water. This unwillingness to move was then explained by the appearance of a large number of young alligators, which, in the confusion, came to the surface like so many chips. We had, without being aware of it, attacked the mother while she was protecting her nest.

In the vicinity of the alligator's nest we came upon a primitive post-office, consisting of a cigar-box, bearing the magic letters "U. S. M.," nailed upon the face of an old cypress-tree. It was a sort of central point for the swampers, where they left their soiled notes and crooked writing to be conveyed to the places of destination by "whomever came along." We, desiring to act the part of a volunteer mail-carrier for the neighborhood, peeped into the post-office, but there were no signs of letters; so our good intentions were of no practical effect.

Our little craft bumps along from one cypress-stump to another, and fetches up against a *cypress-knee*, as it is termed—sharp-pointed lances which grow up from the roots

The Lookout.

of the trees, seemingly to protect the trunk from too much outside concussion; glancing off, it runs into a roosting-place of innumerable cranes, or scatters the wild-ducks and huge snakes over the surface of the water. A clear patch of the sky is seen, and the bright light of a summer evening is tossing the feathery crowns of the old cypress-trees into a nimbus of glory, while innumerable paroquets, alarmed at our intrusion, scream out their fierce indignation, and then, flying away, flash upon our admiring eyes their green and golden plumage. It now begins to grow dark in earnest, and we become curious to know how our attentive pilot will safely navigate this mysterious channel in what is literally Egyptian darkness. While thus speculating, there flashes across the landscape a bright, clear light. From the most intense blackness we have a fierce, lurid glare, presenting the most extravagantly-picturesque groups of overhanging palmettos, draped with parasites and vines of all descriptions; prominent among the latter is the scarlet trumpet-creeper, overburdened with wreaths of blossoms, and intertwined again with chaplets of purple and white convolvulus, the most minute details of the objects near being brought out in a sharp red light against the deep tone of the forest's depths. But no imagination can conceive the grotesque and weird forms which constantly force themselves on your notice as the light partially illuminates the limbs of wrecked or half-destroyed trees, which, covered with moss, or wrapped in decayed vegetation as a winding-sheet, seem huge unburied monsters, which, though dead, still throw about their arms in agony, and gaze through unmeaning eyes upon the intrusions of active, living men.

A Post-office on the Ocklawaha.

Another run of a half-mile brings us into the cypress again, the firelight giving new ideas of the picturesque. The tall shafts, more than ever shrouded in the hanging moss, looked as if they had been draped in sad habiliments, while the wind sighed through the limbs; and when the sonorous sounds of the alligators were heard, groaning and complaining, the sad, dismal picture of desolation was complete.

A sharp contact with a palmetto-knee throws around the head of our nondescript steamer, and we enter what appears to be an endless colonnade of beautifully-proportioned shafts, running upward a hundred feet, roofed by pendent ornaments, suggesting the highest possible effect of Gothic architecture. The delusion was increased by the

A Slight Obstruction in the Ocklawaha.

waving streamers of the Spanish moss, which here and there, in great festoons of fifty feet in length, hung down like tattered but gigantic banners, worm-eaten and mouldy, sad evidences of the hopes and passions of the distant past. So absorbing were these wonderful effects of a brilliant light upon the vegetable productions of these Florida swamps, that we had forgotten to look for the cause of this artificial glare, but, when we did, we found a faithful negro had suspended from cranes two iron cages, one on each side of the boat, into which he constantly placed unctuous pine-knots, that blazed and crackled, and turned what would otherwise have been unmeaning darkness into the most novel and exciting views of Nature that ever met our experienced eyes.

The morning came, and the theatrical display of the swamp by torchlight ended, when we were destined to be introduced to a new feature of this singular navigation. A huge water-oak, seemingly in the very pride of its matured existence, had fallen directly across the channel. Its wood was only a little less hard than iron, and the labor to be performed to get this obstruction out of the way was contemplated with anger by the captain of our craft, and in sadness by the "hands," to whose lot fell the labor of clearing the obstruction away. However, the order was given, and no inhabitant of the swamp is inexperienced in the use of the axe. The sturdy blows fell thick and fast, as

Cypress-shingle Yard.

one limb after another broke loose from the parent trunk and floated slowly away. The great butt was then assailed, and, by a judicious choice in the assault, the weight of the huge structure was made to assist in breaking it in twain. While this work was going on, which consumed some hours, we waded—we won't say ashore—but from one precarious foothold to another, until, after various unpleasant experiences—the least of which was getting wet to our waist in the black water of the swamp—we reached land, which was a few inches above the surface of the prevailing flood.

We were, however, rewarded for our enterprise by suddenly coming upon two "Flor-

ida crackers," who had established a camp in a grove of the finest cypress-trees we ever saw, and were appropriating the valuable timber to the manufacture of shingles, which shingles, we were informed, are almost as indestructible as slate. These men were civil, full of character, and in their way not wanting in intelligence. How they manage to survive the discomforts of their situation is difficult to imagine, but they do exist, the mosquitoes drawing from their bodies every useless drop of blood, the low swamp malaria making the accumulation of fat an impossibility, while the dull surroundings of their life, to them most monotonous, cramp the intellect until they are almost as taciturn as the trees with which they are associated. But their hut was a very model of the picturesque, and the smouldering fire, over which their dinner-pot was cooking, sent up a wreath of blue smoke against the dark openings of the deep forest that gave a

A Sudden Turn in the Ocklawaha.

quiet charm, and a contrast of colors, difficult to sufficiently admire, and impossible to be conceived of in the mere speculations of studio-life.

One of our strangest experiences in these mysterious regions was forced upon us one morning, when, thrusting our head through the hole that gave air to our "sleeping-shelf," we saw a sight which caused us to rub our eyes, and gather up our senses, to be certain we were positively awake. Our rude craft was in a basin, possibly a quarter of a mile in diameter, entirely surrounded by gigantic forest-trees, which repeated themselves with the most minute fidelity in the perfectly translucent water. For sixty feet downward we could look, and at this great depth see duplicated the scene of the upper world, the clearness of the water assisting rather than interfering with the vision. The bottom of this basin was silver sand, studded with eccentric formations of lime-crystals

of a pale emerald tint. This we soon learned was the wonderful silver spring of which we had heard so much, which every moment throws out its thousands of gallons of water without making a bubble on the surface. The transparency of the water was marvellous. A little pearly-white shell, dropped from our hand, worked its zigzag way downward, deepening in its descent from a pale green to a rich emerald, until, finding the bottom, it seemed a gem destined forever to glisten in its silver setting. Procuring a "dug-out," we proceeded to inform ourself of the mysteries of the spot. Noticing the faintest possible movement on the surface of the basin at a certain point, we concluded that it must be over the place where the great body of the water entered the spring. So, paddling to the spot, we dropped a stone, wrapped in a piece of white paper, into the water at the place where the movement was visible. The stone went down for some twenty-five feet, until it reached a slight projection of limestone rock, when it was suddenly, as if a feather in weight, forced upward in a curving line some fifteen feet, showing the tremendous power of the water that rushes out from the rock. The most novel and startling feature was when our craft came from the shade into the sunshine, for then it seemed as if we were, by some miraculous power, suspended seventy feet or more in the mid air, while down on the sanded bottom was a sharp, clear *silhouette* of man, boat, and paddle. A deep river a hundred feet wide is created by the water of this spring, which in the course of seven miles forms a junction with the Ocklawaha.

Silver Spring.

Mount Ranier, from the Columbia River.

UP AND DOWN THE COLUMBIA.

WITH ILLUSTRATIONS BY R. SWAIN GIFFORD.

MAPS are so unexpectedly made over nowadays, what with the Old World passion of conquest, and the New World instinct of truck and dicker, that even we young people, who are rather proud of not yet having forgotten our multiplication-table and syntax, are not a little put to it to bound American America, or United Germany, or dismembered France. There was a happy time when a "pent-up Utica" judiciously contracted our powers, and when we were limited toward the pole by undiscovered countries which we were taught to call respectively Russian Possessions and Upper and Lower Canada—which was which of the twins last mentioned the infant mind never clearly apprehending. In those days our national Northwestern estate was represented on the atlas by a green and a brown patch of uncertain outlines, severally labelled "Indian Territory" and "Oregon." Lewis and Clark were popularly believed to be the only civilized men who had ocular proof of their existence. In the common mind they stood only as irregular polygons on the map, and not as so many acres of soil, stones, forests, lakes, rivers, habitable places, over which familiar heavens arched, and where rains fell on just and unjust, the former class being represented by wild animals and the latter by wild men. Even the wise geographers skated nimbly over the thin ice of their ignorance, lingering only long enough for a single observation, to the effect that this vast, unexplored country was chiefly trackless desert and unexplored forest. And even Con-

MOUNT HOOD

gressional orators, who spoke for "Buncombe," and went in, on all occasions, for river and harbor improvements, never could get beyond the third line of the sonorous—

> ". . . . the continuous woods
> Where rolls the Oregon, and hears no sound
> Save its own dashings."

Alas for the infant-schools! Out of that dull, green patch has broken a wealth of offshoots, as out of the scrimp and ugly cactus burst its superb blossoms. A list of States and Territories that dizzies the arithmetic of memory insists on place and nomenclature, and blessed be Providence which ordained that we should not be our own grandchildren, to encounter a tale of three hundred and sixty-five political divisions by them doubtless to be comprehended in the description of their dear, their native land! As the shoots increased the parent-stem dwindled, and now Oregon, pinched and shrivelled, is only a fourth larger than all New England, or rather less than twice New York in extent. And as for the vast Indian Territory, that would seem to exist variably wherever the Noble Savage is upon the war-path, and to comprise so much land as his blanket will cover.

In those better days we children used to have delightful thrills of horror at thought of the Great American Desert and far Pacific coast, peopled, as we believed, with lions, alligators, dragons, polar bears, anacondas, the "anthropophagi, and men whose heads do grow beneath their shoulders"—creatures all the more terrible by reason of the utter vagueness of their outlines and conditions. And we used to play at being Captain Cook, who, to our apprehension, was the very symbol and archetype of discoverers; and, as he and his heroic band, used to do much execution among the heaped-up sticks in the wood-shed, which alternately, or rather indiscriminately, represented the Rocky Mountains, hosts of savage foes, or such a menagerie of beasts as has not been seen since the creation. By-and-by one of us repeated the fable of "Rasselas," which is the apologue of Time, left behind him the Happy Valley of a delighted childhood, and went forth to explore the world. I do not remember that any wise Imlac began that long journey in his company, nor that he came to any Cairo where he spent two years in learning the Universal Language, and where every man was happy. On the contrary, I am afraid that Imlac, who stands for the lessons of experience, joined him only after long years and innumerable scrapes had cost him dear; and that the Cairo where all men are happy is not set down on any chart by which he took his way. At least it was not built between Boston and San Francisco, nor yet between that golden capital and Puget Sound, nor did any spire or minaret thereof glitter against the perfect skies of Oregon, whither the wanderings of the new Rasselas led him. But, to drop metaphor, which, like Malvolio's cross-garterings, "obstructs the blood," it was I who made the journey to Oregon, and I find that I cannot tell a comfortable story without saying so in the begin-

MULTANOMAH FALLS.

ning, with a heart-felt regret that I am not Wallace, or that most charming traveller, Mr. John Hay, instead of myself.

Perhaps oceans change their habits with time, like climates and individuals. It is easier to believe that in 1520 the Pacific lapsed on purple islands a summer sea, than to discredit the incorruptible Magalhaens, of Portuguese truth and directness, with wittingly bewraying the trust of unborn generations. In 1869, however, it had become the most deceitful of waters, with a horrible swell and pitch peculiar to itself, and caves full of head-winds, like Atlantic gales grown up, out on their travels, and equal to any mischief. Nor is the Pacific content to have its grim way with you only while you are its lawful prey. For it has set a bar at the mouth of the Columbia, which for nine days defied the best seamanship of Captain Robert Gray, of the good bark Columbia Rediviva, who named the beautiful river in 1792. And it is only by seizing the unwilling tide in the narrowest nick of time that the pilot compels it to float you beyond the dangerous shoal and into the safety of the stream. Once within the bar, the ship seems to relax every tense nerve and fibre, and to drift on the current like a spent deer which has escaped the hounds. And so, lazily, you come to Astoria.

Astoria, founded by the Northwestern Fur Company, was, I believe, our first white settlement in the Northwest, and it was named in honor of John Jacob Astor, who was the energetic spirit of the company. Astoria is a nice name enough, as names go, and certainly better than Astor's Corner, or Astorville, or New Astor. But to be a mighty trapper, or only to hire the skill of mighty trappers, hardly entitles a man to build himself a monument of imperishable earth, and wood, and water. The Astor Library commemorates in its name a noble benefaction. Astoria preserves the recollection of a sharp and lucky instinct of trade. However, for that matter, there are hardly ten men in a generation for whom a town should be named. Unless Astor, or Lansing, or Lawrence, be many-sided, hospitable, capable of large results and endless activities—unless there be broad avenues leading to temples in his soul, and straight ways to libraries, museums, gymnasiums, schools, in his brain—he has no business to impress his image and superscription on the possible germ of all this completeness. And, if he have this right and title, he will have modesty besides, and never claim it. Alexandria and Rome sound stately, and embalm the pagan virtues of hardiness, courage, force, invincibility. For the men who overran the younger world at least brought blood, brawn, and brains out of their tussle with Nature and man. But our century pretends to a different civilization, and condemns without hope the Anglo-Saxon idiots who, in this age and in this republic, have blasted nineteen post-towns with the name of Rome, and doomed sixteen to stagger under the weight of Alexandria, with the occasional suffix of *Centre*, *Four Corners*, and *Switch*. *Alexandria Switch!* Perhaps we all privately sympathize with the sentiment of Horace Walpole, who declared that he should be very fond of his country if it were not for his countrymen! In the name of grace and fitness, let us keep the sweet

Indian appellatives bequeathed our pleasant places by a vanishing race; and, for whatever other nomenclature we need, let us remember only the "high souls, like some far stars, that come in sight once in a century."

Well, we came to Astoria (which should have been Chetco) in the late afternoon of a perfect summer Sunday. The river, twelve miles wide, lay all aglow with color under the low sun, and out to the west the color deepened and deepened till it seemed to be no longer atmosphere, but substance, like some supernal gem. Astoria is such a tiny place to have set up in the world for itself, so far from civilization! The great river

Rooster Rock.

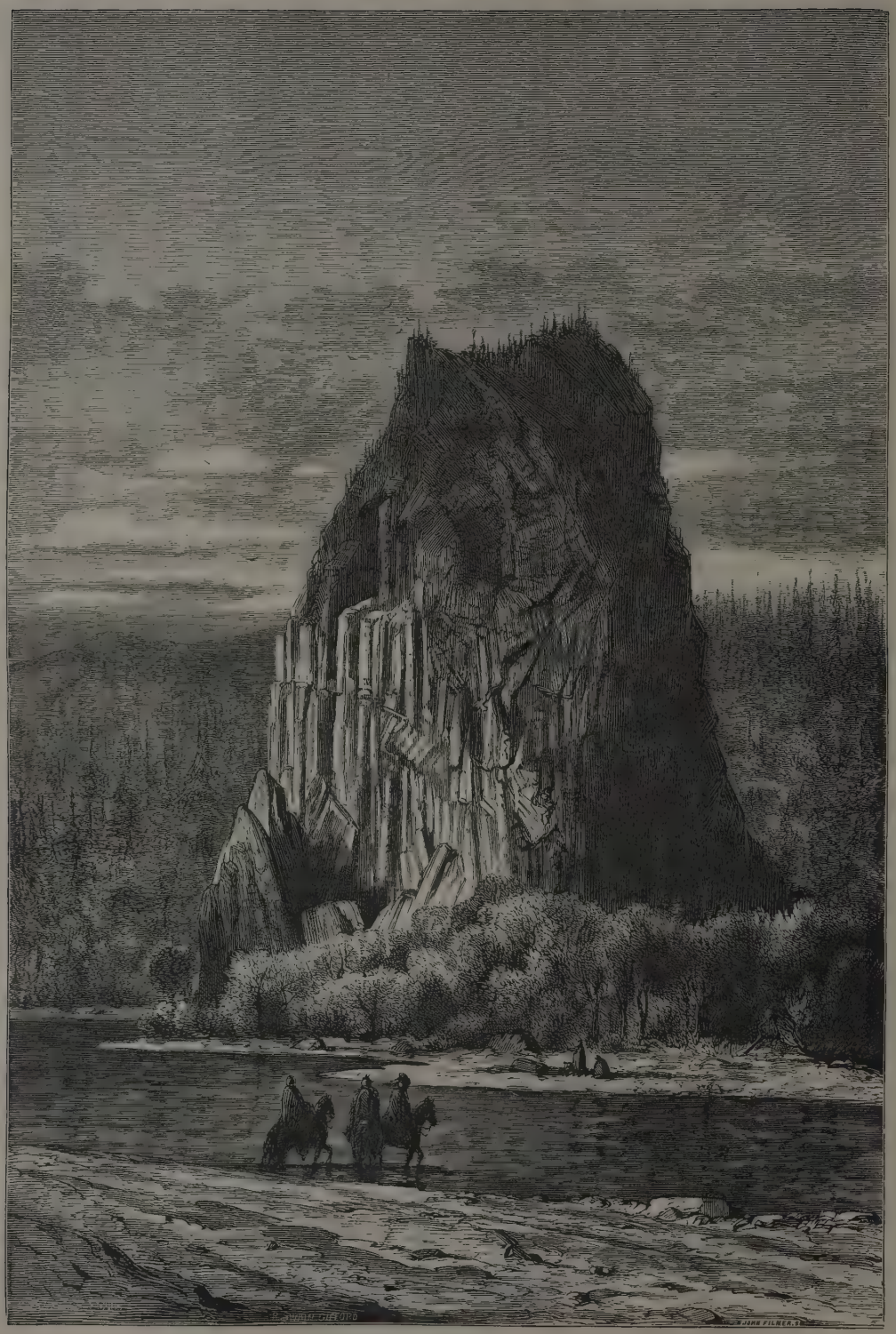
stretches like a sea to the north; the great ocean creeps close on the west; and on the south and east the forests crowd up to the very thresholds—such forests as only the cunning wolf and wild-cat can find their way in. Yet, as the twilight fell, the little church-bell rang with a sound of cheerful confidence in a responsive congregation, and men and women went churchward, and lights glanced in the windows, and a little, soft baby-cry trembled a moment in the air. So I suppose that the world goes on there just as it does in New York or Nova Zembla, with births and deaths and givings in marriage, and envies and heartaches and sweet charities. But to this hour I cannot think of that atom

of civilization, made so pathetically small by the vastness of sea and river and woods, without a little pang of pity for what seems its unutterable loneliness; and yet I dare say it sits by the fire in supreme satisfaction, finds the keenest zest in the excitement of the semi-weekly stopping of the steamer, and, if it condescended to make comparisons, would consider New York at a disadvantage as to situation. That beautiful and blessed quality of self-conceit, without whose protection the contusions of every day would keep us morally black and blue from head to foot, not only saves ourselves from the buffetings of the unworthy, but saves also our kin, our neighborhood, our township, even our select-man, unless he happen to belong to the opposite political party.

Very late the long twilight faded, and the darkness grew alive with sound. The soft slipping of the tide and the murmur of the great woods were the ever-recurring lovely air, as it were, with which unnumbered variations blended. The myriad creatures which, every summer-night, seem to be just born, and to try vainly to utter their joy in stridulous voices, piped the whole chromatic scale with infinite self-satisfaction. Innumerable crickets addressed us in cadence with cheery felicitations on our safe arrival among them; a colony of tree-toads interrupted everybody to ask, in the key of F sharp major, after their relatives in the East, and to make totally irrelevant observations, without ever waiting for a reply; and the swelling bass of the bull-frogs seemed to be thanking Heaven that they were not as these impertinents. This inarticulate welcome, this well-known iteration, made the Pacific seem no longer strange, but familiar as the shores of New-York Bay, and it would not greatly have surprised us to open our eyes, next morning, on the barrenness of Sandy Hook or the fair Heights of Brooklyn.

What they really saw, however, when daybreak found us far up the Columbia, was better than city or crowded anchorage. The great river, still lake-like in breadth and quietness, lay rosy in the dawn. The wonderful forests, whose magnificence our tame and civil imagination could not have conceived, came down from farthest distance to the very margin of the stream. Pines and firs two hundred feet high were the sombre background against which a tropical splendor of color flickered or flamed out, for, even in this early September, beeches and oaks and ash-trees were clothed with autumn pomp; and on the north, far above the silence of the river and the splendid shores, four snow-crowned, rose-flushed, stately mountains lifted themselves to heaven. For miles and miles and miles, Mount Adams, Mount Jefferson, Mount Rainier, and Mount St. Helen's, make glad the way. Adams and Jefferson have an unvarying grandeur of form, a massive strength and nobility, as it becomes them to inherit with their names. Mount St. Helen's rises in lines so vague and soft as to seem like a cloud-mountain. Rainier, whose vastness you comprehend only when you see it from Puget Sound, looks, even from the river, immeasurable, lying snow-covered from base to peak.

Portland, one hundred and ten miles up the river, is the point of debarkation for the San-Francisco steamers, and there is much to be said about that busy and thrifty



CASTLE ROCK.

little clucking hen of a city. But, as Portland is not on the Columbia at all, but on the Willamette, twelve miles from its mouth, it may not now be told what golden eggs she has laid. The little steamer which plies up and down the river leaves her dock at the uncomfortable hour of three o'clock in the morning or thereabouts; and that must be very fine scenery, indeed, which reconciles one to being dragged out of bed in the middle of the night, and dumped, hungry, sleepy, and cross, in the chilly cabin of a day-boat, bare of state-rooms or sofas. The view which daylight brought us was a prospect of the boat's paddle-boxes. A gray mist swallowed up every thing beyond. But when it lifted, three hours later, it was worth while to have been chilled to the bone with its cold, and alarmed by its threat of showing us nothing, to see what it really had to show. For, as it slowly crept back to the shores and up the banks, and so away to the north-pole, which it must have come from, river and shores and mountains and sky, and the sun itself, came out upon us with such intensity of light and color that it seemed as if we or they were absolutely new that morning, and had never seen each other before.

Where the mists lifted, the stream flowed clear and smooth between mountain-shores a mile and a half apart, and rising sharp and bold thousands of feet in air. Forests covered their rocky sides, sometimes rising to the very top, sometimes dwindling into groups and thickets as they climbed. And on the very crest, standing alone and sucking their lusty life from the inhospitable stone, lone pines shot out of the crevices of rock, looking, so far above us, like the queer and graceless toy-trees in the shilling boxes of wooden soldiers, dear to the heart of boyhood. These mountains are a solid wall along the river for miles on miles. Sometimes there is neither rift, nor gorge, nor scar, in their huge sides. Then a canyon opens, and you see beyond and beyond other mountains coming down to link themselves in an unending chain, and glimpses of far-off levels or gray fields of rock bounding the vision. Sometimes a water-fall dazzles and dances out of the sky, a little, fluttering, quivering cobweb at first; then a floating ribbon; then a wind-blown veil of spray; then a cascade, leaping from rock to rock, forty, sixty, a hundred, three hundred feet; then a swift, resistless, triumphant rush of water, swirling and whirling toward the river of its love.*

Yet, if shores and water-falls were beautiful, the forests were the crowning glory of the place. First in rank, again, stood the pines and firs—if they *were* pines and firs. They looked to me like some celestial sort of grown-up, feathery ground-evergreen. And who could expect a pine to rise, straight and fair, three hundred feet, a glimpse of red-brown bolls warm through the foliage of the lesser trees, and a glory of spreading, plumy, dark-green boughs, so purely outlined that every little tuft of them looked as if it, and it alone, had been finished specially to show how perfect a thing a tree-branch may be made for the enjoyment of the woodpeckers and the slugs? Seeing these pines, one

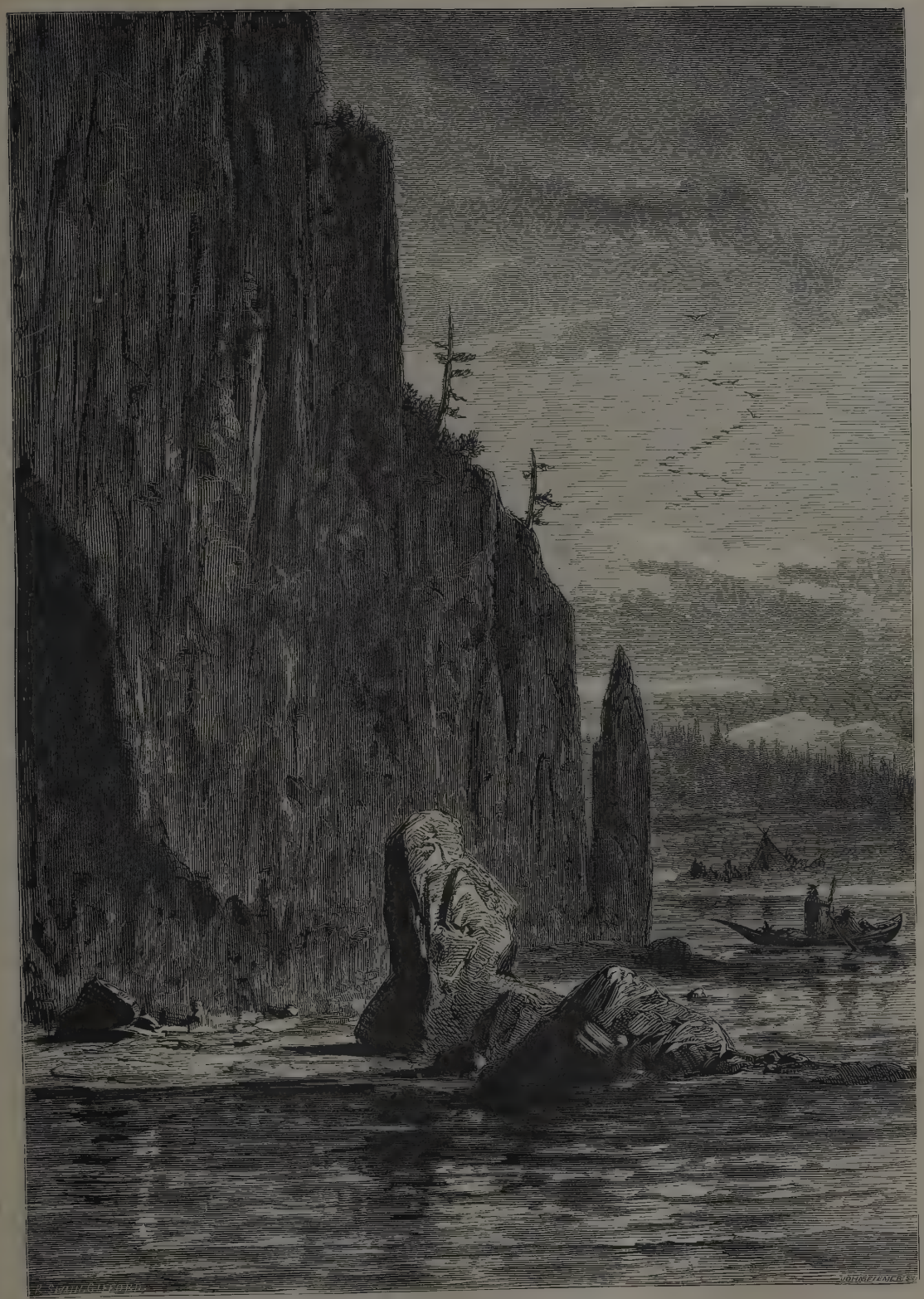
* See Multanomah Falls.

understands the Northern myth of the tree Yggdrasill, at whose feet flowed sacred fountains and whose branches upheld the world.

Then came the cotton-woods, and the cotton-wood is to the Western settler the symbol of intermeddling and knavish incapacity. He considers it the "dead beat" of the vegetable kingdom, usurping ground that belongs to honester growths, making great pretensions to an early and useful maturity, and no better than a pipe-stem in value

The Cascades.

when the axe claims it. Yet there crowded these plausible cotton-woods, standing so idly gracious and welcoming all along the shores in such gorgeousness of golden splendor, and in such royal ease and grace of attitude, that one forgets their good-for-nothingness and their general bad name among the virtuous and useful trees, and takes them to his heart at once. A tree whose polished, brilliant leaf looked like our maple, and whose scarlet, pendent swinging boughs looked like darting orioles, we were forbidden to



CAPE HORN

consider a familiar friend, a very learned pundit assuring us that there were no maples on the river. That was the only vegetation with which we were bold enough to set up the plea of acquaintance, every thing else being quite too splendid to countenance any claim of kinship with the paler and punier growths of our ascetic climate.

Sometimes, so far above our heads that they looked like pigmies at play, we saw the lumbermen getting out logs which came tearing down the rugged sluice-ways to the river, More seldom, even, did a single logger's hut appear, like a hang-bird's nest, far up among the rocks, making the place look wilder than the wilderness, because this little struggle toward civilization and domesticity was so overborne by the savagery of Nature. These half-cleared places had a certain repulsiveness, too. Nature carefully hides unsightly spots with shrubs and bushes, and, when her dead trees fall, she tenderly adorns the wreck they make with vines and mosses. But, when man comes in with rude and indiscriminate rapine, she is profaned, and will long leave the place to his clumsy keeping, throwing neither vine nor moss, nor veiling shadow even, across the scars of his occupation. So that those half-clearings looked rough and coarse as the lives of the inhabitants.

Sometimes the river flowed straight and untroubled. Sometimes the mountains swept round into its path, and the stream bent and parted on rocky mounds or islands, and ran shallow, disturbed, and dangerous. Straightway it quieted into chains of narrow lakes without visible outlet, whereon we sailed close up to lofty, impassable shores, like the walls of Sinbad's valley, but, turning suddenly on our track, found unexpected deliverance. Then, looking back, the way was lost by which we had come. Here, in the solitary mountains, we were alone. No world behind—no world before. The sense of solitude was too vast to be painful. But we felt as escaping prisoners feel when we threaded our way through a narrow rift of stone into the wonderful stream that grew more wonderful as we sailed. For, just there, walls of basalt in vast ledges, rising sheer and straight from the shore, overtopped the farther mountains. Rifted bowlders, like Castle Rock, stood alone, their base washed by the river, their heads upholding the sky. Majestic ramparts, like Cape Horn, rose, a vast, columnar wall, sometimes seven hundred feet in height. Columns, and obelisks, and shafts, lifted themselves with a mightier strength and a more majestic grace than architecture has been able to achieve. And through these stately gate-ways we came to the Cascades.

The Cascades are the fierce and whirling rapids wherein the river falls forty feet, twenty feet of it being taken almost at a leap. But for five miles the river is a seething whirlpool, and a queer little railroad on the Washington side affords the portage. The track runs so near the water's edge that one has a view of these rapids for the whole way, from the Middle Block-house, relic of not unremote Indian wars, to the drowned forest above the upper landing. The whole river-bed is gigantic rocks, sometimes hidden by the water, sometimes tearing through the water to make sharp and naked islands, between which the current rushes down, white with foam and with a roar

like the sea. Round the rocks and between the rocks and over the rocks, and almost burrowing under the rocks in its force, in those five miles the river takes on every possible form of cascade. Yet where we take steamer again, a moment before the river makes its first plunge, it is as quiet as the Connecticut, and washes along over submerged stumps like any slow bayou.

Being born under a lucky star, Imlac and I were invited to ride on the engine, nay,

Middle Block-house, Cascades.

on the very cow-catcher. It is impossible to imagine a madder excitement. With the whole tremendous motive-power behind you forgotten, you seem to be flying, without even the drawback of having to flap your wings. The wild river to the right of you, the wild mountains close on your left hand; your flight through rifts and chasms of stone which seem ever crowding forward with an evil-minded will to shut you in; just a glimpse of blue sky far above, such as miners see from the bottom of the black shaft; a fierce

rush and roar of wind that strikes down your very eyelids—this is riding on the cow-catcher in the canyon of the Columbia. Half blinded as we were, we saw, as we passed it, the great sides of Rooster Rock and a little log-house beneath. This was the scene of Lieutenant Philip H. Sheridan's first battle. Here, in 1856, a small party of white men was for two days besieged by a strong force of Indians; and here the irrepressible lieutenant, tired of his wise and masterly inactivity, determined to attack in his turn, and totally routed the enemy in a very whirlwind of a charge.

Now you are in the heart of the mountains. Soon the rock walls approach each other, and the stream flows narrower and fiercer. The wind roars through the gorges,

Peak of Red Rock

and in the spring, when the banks are full, beats up such waves that a boat cannot live in them, though these straits are two hundred miles from the sea. The walls are basaltic, columnar, rising in distinct, rudely-modelled pillars from four hundred feet to twelve hundred. Now and then, a bold rampart measures two thousand five hundred feet or even more. The receding or advancing cliffs break the river into a chain of tiny lakes. Wherever the mountains fall back on the south, Mount Hood fills the horizon, snow-covered, shining, vast. Mount Hood is fourteen thousand feet in height, and it is mortifying to admit that Mont Blanc is almost sixteen thousand. But, with this foreground of river and forest, with all this blaze of color set against the cold splendor of the icy peak, and with the blue intensity of the warm sky above, Mount Hood is more

magnificent than words can tell or brush can paint. And, if any "vagrom" man, having seen the two, pretends to think Mont Blanc the finer, let us, as Americans, laugh him to scorn.

Where the mountains recede before Mount Hood, the forest again encroaches, but it leaves bare a desolate peak called Coffin Rock, which was a place of Indian sepulture. Cairns of gray stones cover it, and rude monuments of rock. One is not near enough to see the vileness of the human taint upon it—for your true Indian in his death is little better than in his life, and bequeaths himself, a foul legacy, to the pure elements—and its gray melancholy is pathetic.

The Dalles is the second town of Oregon. The Idaho miners make it their base

Coffin Rock.

of supplies. The gold comes down there for shipment, and this babe in the woods even dreams of a mint. But its interest to the traveller is neither in grocery nor in ore, but in its wonderful outlook on river and mountain. For ten miles up the stream the *dalles*, or flag-stones, choke the way, and there you must take to the cars again. Here the strange, weather-beaten, weary-looking, old red rock reappeared, after a long absence, looking, amid the harder and bolder cliffs, like a poor relation, pathetic, but very seedy. The queer, battered, time-worn peak on the opposite page is of it.

The cliffs disappear above Dalles City, and lo, the sand-region! The endless wonder of the Pacific-coast journeys is the suddenness of their changes, as if supernatural scene-shifters were kept constantly busy in whipping off the old scenes, and setting new and

unexpected ones for the next act. From forests of tropic splendor to mountains of northern bareness and grandeur, from still pond to roaring cataract, from verdure and cultivation into Sahara, you pass without the least hint from Nature of what she means to do five minutes hence. Possibly Science gets the better of her, and finds out her whimsical intentions; but to the unlearned she seems to have gotten a little tipsy on that wonderful air—which would intoxicate the soberest—and not to be quite sure of her own mind. Her desert on the Columbia is a lively suggestion of her greater works of the same order in Egypt or elsewhere. It looks a limitless plain of hot white sand.

Passage of the Dalles.

The wind is a hurricane, and seems to blow from every point at once, so that the heavens rain a sandy shower. The shifting, sifting sand covers the track. Men in sand-white garments, with sand-white beards and hair, blindly delve along the rails to clear them, and limp aside with sand-stiff joints that seem to creak, as we go by. The sky is a pale-blue vault, faded out by this torrid plain. The sun is veiled, intense, and colorless. The earth is like a place of graves, as if millions of men, whole peoples, whole races, had been buried there and forgotten. But, if Nature had ever set any race there, it must have been of the lowest—in mind vacant, in body vile, in worship regarding stones and

wild animals, its only symbols of steadfastness and power. And when on the flat-shore rocks we saw the bark lodges of the Trascopin Indians, vile children and viler men and vilest women swarming within and without, we felt that they were accounted for—stupidity, dishonesty, beastliness, and all—and had no disposition to cast a stone at them.

The fifteen miles of portage show superb river scenery wherever the sand will let you see it. It is a succession of rapids, falls, and sucking currents, where the *dalles*, or *dales*—rough troughs or flag-stones, which have given their name to the place—make crooked and narrow channels for the stream. Every form which water may put on, every tint with which it can be beautiful, every caprice of motion with which it can move, finds illustration in this Columbia. Below the great fall, the whole volume of the stream—whose branches stretch north through British Columbia, east through Idaho and Montana, south and west into Nevada, and, reaching down, gather in the icy rivulets of the Rocky Mountains—pours through a gate-way not fifty yards in width, whose sides are perpendicular precipices, hewn as with implements. Smooth and green and glassy, it slides under brown shadows but to be torn again into a hundred ribbons by rocks below, as it has just been torn by rocks above. At the falls it is a mile wide, and plunges over a rocky wall twenty feet high and stretching from shore to shore.

Here are the famous Salmon Falls, up which the salmon go to the quiet reaches of the river to spawn, shooting the rapids with incredible agility. If you can keep your footing on the slippery ledges of rock, you watch them, fascinated. Up they come through the fierce and sucking rapids, gleaming white against the black stones that here and there tear the water; first come a few together; then a multitude swirls along; then the whole river from side to side is light with their innumerable host. And they mind that precipice and torrent no more than if it were a summer pool within its reedy margent. They swim swift and stately to the very foot, where you lose them in the seething, white whirlpool. Something flashes in the air, elastic, strong, light. Something glides up the stream above the fall. The daring, determined, wonderful thing has made that leap, defied rock and torrent, and found its safe shelter in the quiet pool beyond. Or, there is the flash, and then a struggle, and the poor bruised creature, wounded to death against the sharp-edged stones, drops back upon the current, and floats down a bloody track, dying after a little while. So they come, and come, and come—such myriads of them—and leap, and win, or lose, for all the hours of the day and for half the days of the year.

All over the rocks at the foot of the fall flutter the very scanty and disreputable rags in which the noble savage invests minute and accidental portions of his body. We nowhere saw the forest-god whom Cooper believed in, nor yet the statuesque and noble hunter whom Ward has found. It is not possible to imagine human creatures more unromantic, more indecent, more loathsome, more inhuman, than the visible Indian who

appears along every line of travel from the Kansas border to the northwestern boundary. That typical warrior who should be capable of declaring—

> "Blaze with your serried columns!
> I will not bend the knee;
> The shackles ne'er again shall bind
> The arm which now is free!"—

lives in the mountain-fastnesses, if he live at all, and does not corrupt his good manners with the evil communications of pale-faces. The red man of the plains, of the rivers, of the railroad and stage-coach neighborhoods, belongs to the universal genus *loafer*. He

Salmon Falls.

is a mighty hunter only of other men's corn and eggs. Savage virtues, if there be any, have departed from him, and civilized vices clothe him as with a garment. These Trascopins along the Columbia live chiefly on the salmon, and, when they have dried, twice over, all that even their gluttony can desire, they still go to the falls, day after day, and for mere wantonness of cruelty spear the beautiful fish and throw them out on the stones to die there horribly, and rot and infect the air. The ledges were slimy with decaying salmon, and abounded with a horrid parasitic life. Sight and smell drove us quickly away; but the noble savage evidently enjoyed it all. You do not care for their thieving, perhaps; for, besides that you own neither cornfields nor hen-roost within three thousand miles, you reflect that our worthy ancestors set them a large example in that way, to

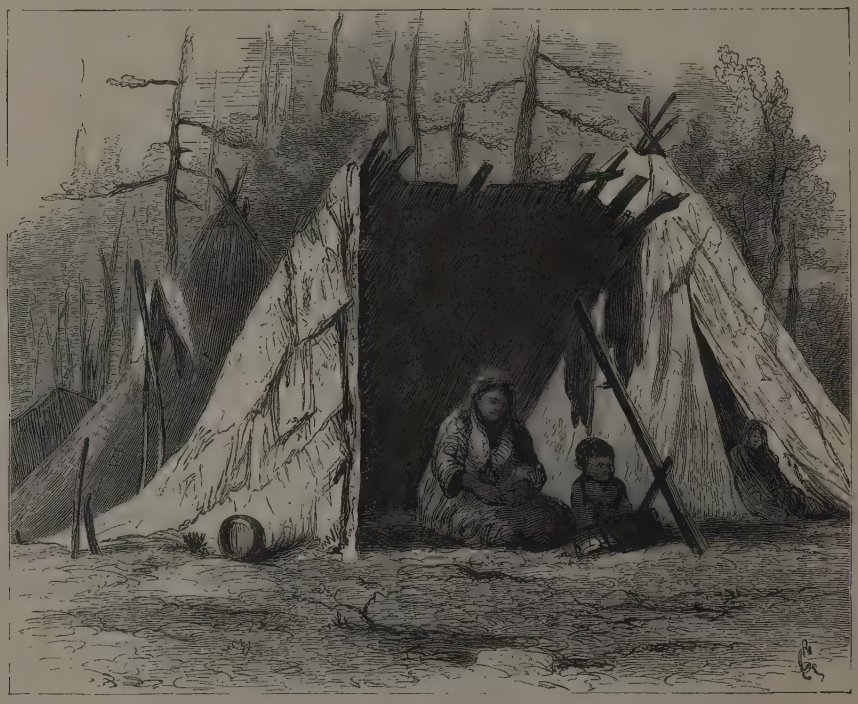
begin with. Moreover, thieving rises into a notable industry, when the alternative of idle hands is this sickening barbarity. But you do care for all their ignorance and dirt, and foulness and disease; and you are pricked for weeks afterward with a sense of personal responsibility in the matter, that clings like the shirt of Nessus.

And, with whatever contemptuous pity you regard these step-children of Nature, it is impossible not to believe that the sum of the united Trascopins and Arapahoes, and Shoshones, and Pahutes, and Crows, and of all other ill-conditioned tribes there be, does not equal in value to humanity the single unit of young Loring's life. Therefore, it would seem that there must be a proper Indian policy somewhere between the indiscriminate wiping out which the frontiersman insists on and the peppermint-candy wiles of Mr. Colyer. The Howard who shall devise it will bring peace to the tender consciences of all travellers who have seen the Indian at home, and have carried the consciousness of him as a nightmare ever since.

I feel that I should ask pardon of the polite reader for this most unhandsome episode, and of the sentimentalist for the callousness of these observations. But the Indian *is* just what I have drawn him, and it seems as if we might sooner settle the perplexing problem of what to do with him if our chameleon policy, whether of peace or war, contemplated the actual creature, and not a figment of the brain of the philanthropist on the one hand, and of the border-settler on the other. For my own part, I believe that not only are not all the aborigines of the West worth one high-hearted young Loring, but that Darwin himself, on seeing them, would be constrained to accord them slow and multiplied centuries to "mount through the various spires of form" before they should reach the negative and harmless excellence of the poor fish they slaughter.

And, if this phase is the very worst of savage life, and an unfair exhibition of their tendencies, why, I have seen the very best phase as well, and I found it very disappointing. I spent some time once at a Catholic mission among the Potawatamies, and I carefully botanized among the transplanted wild shoots. The school was a triumph of drill. The young barbarians, in formal jackets and trousers, inexpressibly uglier than their native rags or their yet more native dull-red skins, were frowned down by big blackboards, and confronted by verbs and definitions and the multiplication-table, and in every way dreadfully put upon by star-eyed Science. They were letter-perfect. I do not remember that they blundered in an answer. They even divided fractions, and their behavior struck me into amazement and admiration, as Hamlet's affected the queen; for it is a thing *I* can't do. But they were only as so many puppets pulled by a string. The lessons meant absolutely nothing to them; they had not an idea. *Why* you should divide a fraction, they had no more notion than the wooden rosaries they all wore, whereas *I* see a possible propriety in the impossible achievement, which shows a superior mental endowment. All the individuality was ground out of the poor little puppets. After the geography-lesson was written on them, it was rubbed out, as it were, and a

grammar-lesson was set down in its place; and then the sponge of the next text-book erased every trace of noun and verb, and the surface was blank for the catechism or hymn, or whatever came next. When school was dismissed, the little martyrs did not fly to play, as lusty white boys fly. They moped away by themselves, holding no commerce with each other, too broken-spirited even to stare at the visitors or to show any eagerness as to the appropriation of pennies very liberally bestowed. Some of them lay on their backs and looked at the sky, and the rest mooned about so vacantly that it was impossible for any thing else to be so slow and indifferent except a snail. When they grow up, it looked as if they would either go back to the wild life or settle down on



Indians on the Columbia.

the debatable border with the most scampish of the white squatters, and poison their dull blood with the coarse but necessary excitement of bad whiskey. No, it is useless; education does not agree with the Indian blood, and, when you try to make this red-handed Ishmael put on *our ways*, he merely loses his own, and is more lazy and not less vicious.

Above the Dalles the forests disappear; nay, every leaf vanishes, and for miles on miles the banks are covered with thick brown grass, wherein not even a mullein-stalk springs. The scenery is tame, and the most eager tourist seldom ventures above Wright's Harbor, two hundred and fifty miles from the sea. Steamers ply, however, for four hundred miles, and then, after a portage along impassable rapids, an odd little boat

runs up the Snake River, in Idaho. When the great railroad shall connect the head-waters of the Missouri with the head-waters of the Columbia, the six hundred miles of track will open an incalculable wealth to trade, and the most magnificent wilderness of the world to travel. But at present, what with ubiquitous savages, and perils of cold and hunger, and lost trails, it is as well to pause at Celilo, not far above the falls. There, having inspected "the largest warehouse in the United States, being over eleven hundred feet in length, and built to receive the Idaho freights," as the station-master informs you in a solemn recitative, and there being nothing else in or of Celilo that unanointed eyes can behold, you are speedily ready for your train. And so back you go, leaving the falls and salmon and savage, leaving desert and whirlpool and whirlwind, at your back, and not reluctantly returning to the common-sense and conventions of decent and sober Dalles. All the Dallesese, I remember, were "assisting" at a Sabbath-school festival when we arrived, and, going to bed on the boat, we seemed consequently to have inhaled a whiff of New-England air, and to sleep the better for it.

To come down the river in the early morning, with the clear eastern light behind you, is almost finer than to sail eastward, with the glow of the sunset over mountain and stream. Certainly Mount Hood lay more stately calm and fair, quite apart, rising lonely from a far, upward-going plain, white, glittering, perfect. Mount Adams and Mount Jefferson, also, seemed to win a charm from the presence of the pure morning; and we had not in the least understood Mount Rainier until this second coming before it. Under the blue heavens it rose in soft and tender liftings, till its triple crown overtopped Mount Hood itself. From Puget Sound, the view of it is grander, but not so lovely; and, as we watched it, it seemed even more worthy to be remembered than sweet St. Helen's.

There are actually many hundreds of persons, no better than ourselves, who are allowed to live all their years in the presence of these five mountains; but we did not see the human likeness of the Great Stone Face anywhere, and we observed that worries, and sorrows, and sickness, and even death, came to them as to us. So, when it seemed best, we were content to leave the enchanted river behind us, and to come back to the familiar East, where, if work and care and pain awaited us, duty as surely waited for us, too. And, as we reluctantly sailed away from the friendliness we had found, and from the majestic forests and the gracious mountains, we seemed to hear in the ripple of the waves these words of a most sweet philosopher: "Let us remember within what walls we lie, and understand that this level life, too, has its summit, and why from the mountain-top the deepest valley has its tinge of blue; that there is elevation in every hour, as no part of the earth is so low that the heavens may not be seen from it, and we have only to stand on the summit of our hour to command an uninterrupted horizon."

LOOKOUT MOUNTAIN AND THE TENNESSEE.

WITH ILLUSTRATIONS BY HARRY FENN.

The Tennessee.

IT rained the first day we were at Chattanooga. It rained the second day. The waters came down in ceaseless floods, and Lookout Mountain, with its head buried in the mist, seemed, as seen from our hotel-window, lumpish and uninteresting enough. "After all," thought I, watching the spiritless mass through the thick lances of rain, "Leigh Hunt was right. A great mountain is a great humbug. Look at this! A huge, formless hump, a colorless, dead protuberance, that obstructs rather than supplies a

prospect! What is there about it, or of it, or in it, that men should come long distances to see it, and risk their necks by climbing it?" These ejaculations were uttered half aloud, and the mountain-loving artist, overhearing them, quickly uttered his instinctive remonstrance. "Wait," he wisely suggested to his companion's impatience, "until the rain ceases. Sunshine will change your mood and your conclusions."

There was nothing, indeed, to do but wait, although Chattanooga is dreary enough in a rain-storm. The town was denuded during the war of all its trees, a large part of it was burned, and once it was buried up to its second-story windows under the Tennessee. These things have not served to beautify it. The streets are unpaved, and apparently unworked; in wet weather they are of unspeakable mud, in dry weather of indescribable dust, and at all times they present a surface of ridges and chasms that make travelling upon them a penance which one's bones long feelingly remember. The principal business-avenue consists of little better than rudely-constructed barracks; so, what with the bare and rude streets and the roughly-constructed buildings, the place seems more like an extemporized mining-town of the far West than an old settlement of the East. But there is exhibited all the activity of a new colony; better buildings are rapidly going up; a fine new hotel has been opened; there are signs everywhere of prosperity and growth; and hence, if the Tennessee can only be persuaded to respect its legitimate boundaries, we shall find the town in good time a prosperous and agreeable place. It is a very active town. There are several railroads, and many trains come and go; it is an extensive cattle-depot, and droves of horses and bovines ceaselessly fill the streets. The citizens are rather proud of their big new hotel, and they look upon Lookout Mountain with feelings of friendly interest; but I do not know that any thing delights them so much as reminiscences of the big flood that occurred about five years ago. They will show you the high-water marks with unsuppressed enthusiasm, and dwell upon the appearance of steamboats in their main street with an exhibition of pride that is very touching.

When the sun came out on the third day we set forth with all expedition for the mountain. During the regular season, which we had anticipated by a few weeks, coaches run at fixed intervals to the mountain-top, where two hotels give entertainment to all comers.

As we were to remain on the mountain several days, our carriage was packed with all our effects, and we sallied forth with eagerness to scenes which the war brought into such prominent notice. After a drive of about two miles, we began the long, sloping ascent of the mountain-road, and half an hour later found us midway up the "formless hump," very much disposed, indeed, to beg the mountain's pardon for our depreciating criticism at the hotel-window; for now forms of the most varied and striking character revealed themselves in the cliffs and ravines of the mountain, and already superb prospects of the far valley and the winding Tennessee showed through glimpses of the trees.

LOOKOUT MOUNTAIN.—VIEW FROM THE "POINT."

Above us hung beetling cliffs, which Mr. Fenn's pencil vividly delineates in one of the larger illustrations, while below us were precipitous reaches, here and there picturesquely marked by gigantic bowlders. I do not know but the best charm of mountain-views is in these half glimpses that you catch in the ascent. If they do not possess the sublimity of the scene from the supreme altitude, they gain many beauties in the nicer articulation of the different objects below. The picturesque, moreover, is a little coy, and reveals itself more pleasingly in the half glances through broken vistas than at the open stare. Our journey up the sides of Lookout was continually arrested by the charming pictures of this character that the winding road brought to view.

The first sensation of the prospect from the top is simply of immensity. The eye sweeps the vast spaces that are bounded only by the haze of distance. On three sides no obstacles intervene between your altitude and the utmost reaches of the vision. To your right, stretch successive ranges of hills and mountains that seem to rise one above another until they dispute form and character with the clouds. Your vision extends, you are told, to the great Smoky Mountains of North Carolina, which lie nearly a hundred miles distant. The whole vast space between is packed with huge undulations of hills, which seem to come rolling in upon your mountain-shore, like giant waves. It is, indeed, a very sea of space, and your stand of rocks and cliffs juts up in strange isolation amid the gray waste of blending hills. Directly before you the undulations are repeated, fading away in the far distance where the Cumberland Hills of Kentucky hide their tops in the mists of the horizon. Your eye covers the entire width of Tennessee; it reaches, so it is said, even to Virginia, and embraces within its scope territory of seven States. These are Georgia, Tennessee, Alabama, Virginia, Kentucky, North and South Carolina. If the view does in truth extend to Virginia, then it reaches to a point fully one hundred and fifty miles distant. To your left, the picture gains a delicious charm in the windings of the Tennessee, which makes a sharp curve directly at the base of the mountain, and then sweeps away, soon disappearing among its hills, but at intervals reappearing, glancing white and silvery in the distance, like great mirrors let into the landscape.

Lookout Mountain presents an abrupt precipice to the plain it overlooks. Its cliffs are, for half-way down the mountain, splendid palisades, or escarpments, the character of which can be altogether better conceived by the study of Mr. Fenn's drawings than by the most skilful description. The mountain-top is almost a plateau, and one may wander at his ease for hours along the rugged, broken, seamed, tree-crowned cliffs, surveying the superb panorama stretched out before him in all its different aspects. The favorite post of view is called the "Point," a plateau on a projecting angle of the cliff, being almost directly above the Tennessee, and commanding to the right and left a breadth of view which no other situation enjoys. Beneath the cliff, the rock-strewed slope that stretches to the valley was once heavily wooded, but during the war the Confederates denuded it of its trees, in order that the approaches to their encampment might be watched. It was

under cover of a dense mist that Hooker's men on the day of the famous battle skirted this open space and reached the cover of the rocks beyond, up which they were to climb. The "battle above the clouds" is picturesque and poetical in the vivid descriptions of our historians, but the survey of the ground from the grand escarpments of the mountain thrills one with admiration. It is not surprising that Bragg believed himself secure in his rocky eyrie, and the wonder must always remain that these towering palisades did not prove an impregnable barrier to the approach of his enemy.

On the summit of Lookout Mountain the northwest corner of Georgia and the northeast extremity of Alabama meet on the southern boundary of Tennessee. The mountain lifts abruptly from the valley to a height of fifteen hundred feet. It is the summit overhanging the plain of Chattanooga that is usually connected in the popular imagination with the title of Lookout, but the mountain really extends for fifty miles in a southwesterly direction into Alabama. The surface of the mountain is well wooded, it has numerous springs, and is susceptible of cultivation. In time, no doubt, extensive farms will occupy the space now filled by the wilderness. There is a small settlement on the crest of the mountain, consisting of two summer hotels, several cottages and cabins, and a college. It is a grand place for study, and the young people of this sky-aspiring academy have certainly superb stimulants in the exhilarating air and glorious scenes of their mountain *alma mater*.

Only one of the public-houses was open at the time of our early visit to the mountain, but already the daily throng of visitors was large. People only came, however, for an hour or two; the regular summer crowds, who during the hot season sojourn among these lofty rocks, had given as yet no signs of their coming, and the principal hotel was closed and silent. The Summit House, however, proved a pleasant little box. We were the only guests, and hence had choice of rooms, and first place in our landlord's affections. The sunshine that seduced us from Chattanooga only kept our company until we reached the mountain-top, when clouds began to obscure the scene, and winds to chill the air. Although nearly three days on the mountain, Mr. Fenn got his sketches with difficulty. There were glimpses of sunshine, and the clouds would lift and give us superb vanishing pictures of the valley and distant hills, touched in spots with sunlight; but the cold winds and the ever-recurring showers made sketching out-of-doors cold and dismal work. At the hotel we kept warm by means of blazing piles of logs, which a little negro lass of about twelve years kept continually piling upon the waiting andirons. To this diminutive daughter of Ethiopia we owe a world of thanks. The little creature was full of work, zeal, and affection; her big eyes had a melancholy contemplation, and her manner exhibited a motherly solicitude that was exceedingly amusing. We christened her after the immortal Marchioness of Dickens. She seemed maid and master of all work. She waited on table, polished the boots, made the fires, helped cook the meals, as her regular duties, and then seemed never tired of watching over our comforts. At

CHATTANOOGA AND THE TENNESSEE FROM LOOKOUT MOUNTAIN.

the first show of the sun in the morning, she entered our rooms and built up fires for us, and the last thing at night was to heap the andirons with wood. The wind pierced through the thin timber frame of the house as if it had been pasteboard, and rendered fires at all hours necessary. The black Marchioness's especial ambition was to polish our boots. She promised each day they should be more brilliantly executed the next. "Won't have no more boots to black," was her mournful comment when we came to depart. "Why not?" was our reply; "there will be plenty of boots to black—in fact, too many, we should say." "No," was the inconsolable rejoinder, "people only come here to dinner. Nobody stays here all night. There will be no more boots to black," and with this lament upon her lips we left her. The spirits of Day & Martin will doubtless discover this polishing zeal, and shower benedictions upon her.

The majority of visitors go to Lookout only for an hour or two, and hence miss some very striking characteristics of the mountain. There are a lake and a cascade of uncommon beauty about six miles distant from the "Point," and a singular grouping of rocks, known by the name of "Rock City." The City of Rocks would be a somewhat more correct appellation. This is a very odd phenomenon. Vast rocks of the most varied and fantastic shape are arranged into avenues almost as regular as the streets of a city. Names, indeed, have been given to some of the main thoroughfares, through which one may travel between great masses of the oddest architecture conceivable. Sometimes these structures are nearly square, and front the avenue with all the imposing dignity of a Fifth-Avenue mansion. But others exhibit a perfect license in capricious variety of form. Some are scooped out at the lower portion, and overhang their base in ponderous balconies of rock. Others stand balanced on small pivots of rock, and apparently defy the law of gravitation. I know of nothing more quaint and strange than the aspects of this mock city—silent, shadowy, deserted, and suggestive, some way, of a strange life once within its borders. One expects to hear a foot-fall, to see the ponderous rocks open and give forth life, and awaken the sleep that hushes the dumb city in a repose so profound.

Lookout Mountain is remarkable generally for its quaint and fantastic rocks. Near the "Point" are two eccentric specimens that are pointed out to every visitor. The "Devil's Pulpit"—did one ever visit a mountain that had not borrowed Satanic phraseology for characterizing some of its features?—the "Devil's Pulpit," almost at the extreme end of the "Point," consists of a number of large slabs of rocks, piled in strange form one upon the other, and apparently in immediate danger of toppling over. The reader will readily discover this queer pile if he consults Mr. Fenn's drawing showing the view from the "Point." Another odd mass is called "Saddle Rock," from a fancied resemblance to a saddle. It consists of a great pile of limestone, that has crumbled and broken away in small particles, like scales, until in texture one may discover a likeness to an oyster-shell, and in form something of the contour of a saddle-tree. With queer rock-

forms, Lookout Mountain is certainly abundantly supplied. It is supposed that these rocks, jutting so far above the level of the Palisades, are remains of a higher escarpment, which, during uncounted centuries, has gradually worn away.

The lake and cascade to which I have referred are known as "Lulu Lake" and "Lulu Falls," *Lulu* being a corruption of the Indian name of Tullulah. The cascade is

Rock City, Lookout Mountain.

one of uncommon beauty. It is nearly as high as Niagara, and far more picturesque in its setting. This lake and cascade can only be reached on foot or horseback; no vehicle can traverse the very rough road which leads to them. But their singular beauty, and the strange, quaint features of the City of Rocks, would reward unusual exertions on the part of the visitor. Lookout Mountain, indeed, is very imperfectly seen by those who

make a hurried jaunt to its Palisades, glance at the prospect so superbly spread out before them, and then hurry back again. There is no mountain and no landscape that does not require its acquaintance to be cultivated somewhat, just as we must meet our friends in many intercourses before we can come to fully understand them. A mountain no more carries its beauty within the ready ken of everybody than a wise man "wears his heart on his sleeve for daws to peck at." The supreme beauty, the varied features, the changing aspects, the subtle sentiments of the "rock-ribbed hills," enter the soul by many doors, and only after a complete surrender on our part to their influences. One can comfortably house himself on the great plateau of Lookout, and there give many days to wandering along its Palisades, or in search of the thousand picturesque charms that pertain to its wooded and rocky retreats.

Our views on the Tennessee are only for a dozen miles of its eight hundred, but

Rock-Forms on Lookout Mountain.

at a point where it outdoes the Hudson in the loftiness of its banks, and gives us its best picturesque features.

The Tennessee comes sweeping down upon Lookout Mountain as if it confidently expected to break through this rocky barrier and reach the Gulf by an easy course through the pleasant lowlands of Alabama. The flood reaches the base of Lookout's tall abutments, and, finding them impenetrable, sweeps abruptly to the right, breaking through the barrier of hills that lie in its course, and, as if with a new purpose at heart, abandons its hope of the Gulf, to eventually reach it, however, after a double marriage with the Ohio and the Mississippi.

The Tennessee is formed by the union of the Clinch and the Holston Rivers, at Kingston, and, together with its principal affluent, attains a length of eleven hundred miles. Steamers navigate different portions, but a succession of shallows and rapids in Alabama, known as "Muscle Shoals," bar vessels from its lower waters to the upper; and

below Chattanooga exist serious obstacles to navigation, known as the "Suck" and the "Pot."

The "Pot" lies some twenty miles below Chattanooga; it is a maelstrom which, at certain depths of water, is wild and beautiful. The swift current is impinged sharply upon a high bluff, and turns to escape, at an angle so acute, that a perfect whirl of wa-

Rocks, Rock City.

ters ensues. Vast trees have been seen caught in its fierce turmoil and swept out of sight; and, in the time of freshets, houses, carried off by the flood, have plunged into the gulf, to reappear none knew where or how. The "Suck" is thirteen miles from Chattanooga. This phenomenon is caused by a fierce little mountain-current, called "Suck Creek," which, in times of high water, brings from its rocky fastnesses such masses of *débris* that the river-bed is strewed with bowlders, and a bar formed, which com-

presses the channel into a narrow, swift, and dangerous current. Thirty years ago the Government erected a wall some forty feet distant from the left bank, and, through the narrow passage thus formed, boats ascending the river are warped up by means of a windlass on the shore. Under the intelligent direction of Lieutenant Adams, of the United States Army, Government is now endeavoring to remove the obstructions and widen the channel, which at this point is narrowed from the average of six hundred feet to two hundred and fifty; and hence the novel and picturesque sight of a steamer struggling up against an adverse current by means of a windlass on the bank, with the songs and shouts of the laboring deck-hands, will soon be, even if it is not now, a thing of the past.

To visit this famous "Suck," and get a sketch or two of the shore, was the purpose of our journey along the Tennessee. The three days of wintry airs on Lookout Mountain had made out-of-door sketching chilling work, but now a soft and balmy April day invited us upon the jaunt; so Mr. Fenn packed his sketching-traps; a vehicle stout in spring, and equal to the vicissitudes of a rough and rocky road, was procured, and we sallied forth.

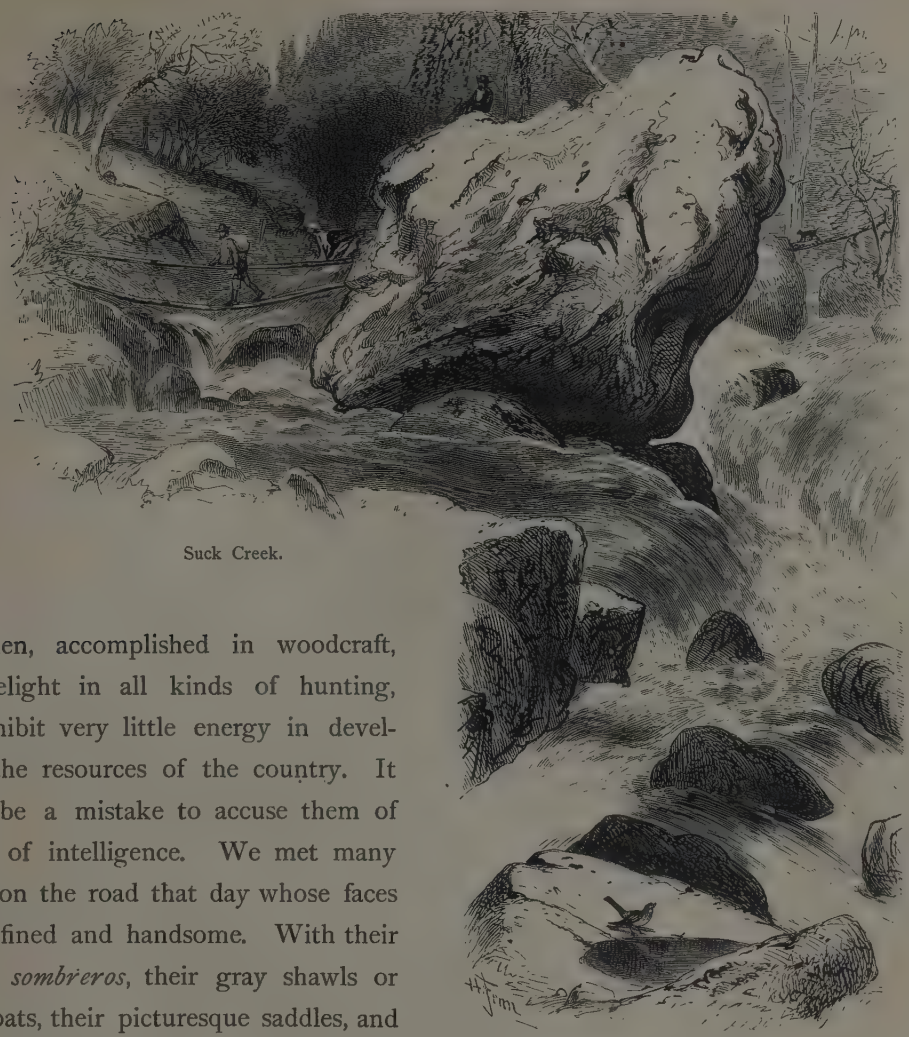
There was once a fine bridge across the Tennessee, at Chattanooga, but it fell a victim to a great flood a few years ago. The Chattanoogians have been so busy since erecting new warehouses, new railroad-depots, and new hotels, that they have forgotten the piers of masonry in the river-bed, which in grim solitude seem to utter a protest against their neglect. Not that we, searchers for the picturesque, would have had it otherwise—for a bridge would have deprived Mr. Fenn's sketch-book of one of the quaintest ferries in the country. The illustration, which the reader will readily find, probably needs a little explanation, which let me endeavor to give. It is a rope-ferry, having for motive-power the river-current, which it masters for its purpose by a very simple application of a law in physics. A long rope from the ferry-boat, supported at regular intervals on poles resting on small flat-boats, is attached, several hundred feet up-stream, to an island in mid-water. The boat thus secured is pushed from the shore, when it begins to catch the force of the current, a greater surface of pressure being secured by a board, like the centre-board of a sail-boat, which is dropped down deep into the water on the upper side. The current sweeping against the boat would carry it down-stream, but the attached rope retains the vessel in place, and we have, as a result of the sum of the forces, the boat swiftly propelled on the arc of a circle across the stream. Thus, by a very simple contrivance, a motor is secured which requires neither fuel nor canvas, which is uniformly available, and which is obtained entirely without cost. A very odd effect in the scene is the fleet of small flat-boats, upholding the long and heavy rope, which start in company with the large vessel in the order and with the precision of a column of cavalry. Moving in obedience to no visible sign or force, they impress one as being the intelligent directors of the movement, and are watched, when first seen, with lively interest.

The method adopted at this ferry is occasionally found in the South, but, ordinarily, ferry-boats are carried from one side of the stream to the other by means of a suspended rope from shore to shore. The Chattanooga ferry is very picturesque, apart from the method of progression. In busy times a sort of tender accompanies the larger boat, and upon this our carriage, with some difficulty, was driven. Boat and tender were rude in construction, old, and dilapidated. The main vessel had a small enclosure, of a hen-coop suggestiveness, which was called a cabin, and which, at a pinch, might give shelter to three or four people. The groups upon its decks were striking. There were sportsmen with a great following of dogs, horsemen with their Texan saddles and wide *sombreros*, vehicles, and groups of cattle, all mingled with the most happy contrast of color and form. On the opposite shore, as we drew near, were visible great numbers of waiting horsemen and cattle, giving evidence of the active business of the ferry, and emphasizing the wonder that the bridge has not been restored.

If any mortal hereafter essays a visit to the "Suck," let him go by saddle. If he ventures by vehicle, sore, very sore indeed, will be his trials. Our road, one of the most picturesque and charming we had ever travelled, certainly outdid in roughness of surface any previous experience. It led through superb woods; under high banks; over rocks and bowlders; into swift-running streams; up steep hills, and down declivities. We were pitched into the bottom of the wagon one moment, tossed against the top at another, now precipitated affectionately into each other's arms, now hurled discordantly apart against the wagon-sides—all of which, however, while trying to one's bones, added to the relish of the journey, or rather, it may be safer to say, to the relish of our recollections of it.

The Tennessee, as already said, runs between high hills, mountains even, being the continuation of the Cumberland range. Spreads of table-land, with intervening dips of the forest, mark one side of the river, while on the other the rocky hills rise abruptly from the water's edge. The river is very winding, and the road sometimes runs along its course, sometimes loses sight of its silvery waters altogether; but the appearing and reappearing surface of the stream affords continual changes to the picture. Between the bluff and the river are narrow strips of arable bottom-land; and these, which sometimes are only narrow ribbons bordering the stream, and at others wide fields, are very rich in soil and carefully cultivated. But the owners, almost without exception, live in rude log-cabins. We saw but two or three houses above this condition. The occupants are sometimes negroes, but the majority are whites, who, however, as a rule, are not of the class known as "poor whites." The cabins are rude, the grounds limited, the means scanty, but the residents are a proud, intelligent set, who should be classed as hunters and woodsmen rather than as husbandmen. Their delight is the woods and the mountains, and they almost live on horseback. Their needs are a gun, a dog, a horse, a cottage, a wife, and a cow—and pretty much in the order enumerated. They are semi-

FERRY AT CHATTANOOGA.



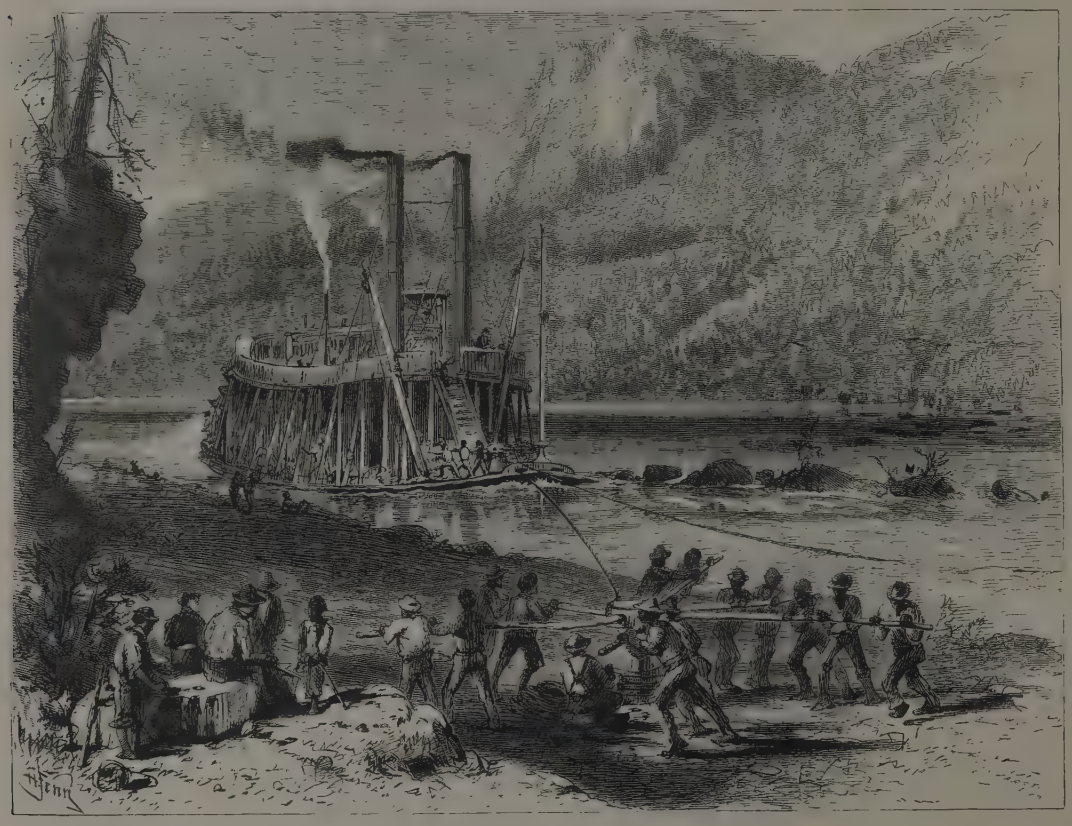
Suck Creek.

sportsmen, accomplished in woodcraft, who delight in all kinds of hunting, but exhibit very little energy in developing the resources of the country. It would be a mistake to accuse them of a lack of intelligence. We met many people on the road that day whose faces were refined and handsome. With their sloping *sombreros*, their gray shawls or army coats, their picturesque saddles, and their general air of graceful dilapidation, they looked like so many brigands. We noted specially two or three; and one who drove a herd of cattle along the road possessed a face that for intellectual refinement would be difficult to match.

At noon we reached our destination, and were shown a somewhat picturesquely-situated log-cabin, where we were assured dinner could be obtained. Our apprehensions may be imagined. But as soon as we drove up to it, and noticed the long array of polished tins and glistening buckets, we felt assured that at least cleanliness would characterize our repast. A very neat, pleasant-faced woman came forward at our appearance, and with quiet self-possession promised us a rural meal of ham, eggs, and hot rolls. The house was neat as a pin, and the woman refined and intelligent. But it contained one room only, and this without a window. Air and light penetrated the apertures between every layer of logs; and in winter, when through the mountain-gully fierce winds must sometimes sweep, the comfort of this cottage by the river may be estimated. Rude

as it was, the situation in summer-time was charming, which the reader may discover by consulting the initial drawing by Mr. Fenn.

At this place we desired to cross the river, but no means could be obtained to do so. No boats were to be found along the shore excepting the primitive "dug-out," which every one said would not be safe on account of the swiftness and turbulence of the current. This was a little exasperating. The rudest savage tribes of the Pacific build canoes that can sail far out at sea in high winds and rough water, but the boats of the Tennessee can only be employed in the smoothest of water. They cannot be trusted in



Steamer on the Tennessee warped through the "Suck."

a ripple; and yet the very simple contrivance of an outrigger, such as used by the Pacific natives, would render them safe even in a high sea. The skill of our Tennessee men is equal, no doubt, to many emergencies of the mountains, but their resources for the water are certainly very limited. As we could not get on the other side of the river, we started in search of the most eligible points on this side. In order to reach the shore, we had a wild and picturesque walk, reaching in due time the romantic stream which ignobly rests under the title of "Suck Creek." This stream is a mountain-torrent; it comes tumbling through rocky crevices above with all the flash and splendor of the "waters of Lodore," and pours with turbulent energy into the Tennessee. In

freshets it comes from its mountain-home with tremendous volume and force, burying far under water even the high rocks delineated in the illustration, and sweeping into the river a score or so of smaller impediments. We crossed this torrent on a round and very small tree-trunk, and, not having the skill of the natives, ignominiously crept along it on our hands and knees. But, shortly after, seeing one to the manner born, with a pack on his back, and a load in each hand, quietly and confidently walk the shaking and unsteadfast bridge, we on our return plucked up courage and performed the feat in an upright position. The picture here was very charming—mountains closing us in all around, a canopy of noble forest-trees, and the music of the mountain-stream as it plunged over its bed of rocks.

Securing the sketches necessary, we wended our way back. Under easier travelling, the drive would be one of great enjoyment. It was interesting to note the pains that are taken along the shore to cultivate every portion of the alluvial bottom-land, and in some instances we saw desperate endeavors to plough steep acclivities on which foothold could be obtained only with difficulty. The river annually overflows these bits of bottom-land, and leaves its valuable deposits. But, while these freshets thus enrich the land, they exact their compensation in fevers; and occasionally the river disregards all limitations, and seems to aim at the very submerging of the mountains. All along the road signs were evident of the great freshet a few years before; the high-water marks indicating a rise of at least twenty feet above the line of the road, while the road itself was twenty or thirty above the river-bed. Far up, in crotches of trees, could be seen heaps of brushwood and *débris* left by the flood as it withdrew. The people were compelled, on that occasion, to rapidly withdraw to the mountains, many of them returning to find their rude but valued homesteads swept away by the stream.

If the morning drive was charming, the return was enhanced by the beauty of the setting sun. The river, the trees, the hills, gained new beauties from the rays of the level light; and Lookout Mountain, whose high top would occasionally reveal itself, towered superbly, purpling in the evening air. Arriving at the ferry near sunset, we experienced some amusing incidents in getting across the stream. It is one feature of this method of crossing a river that the exact place of landing cannot be controlled, the rise or fall of the stream varying it considerably. On our return we found the nose of the boat thrust into a bank, and some apprehensions prevailing as to how the waiting cargo was to be got on board. Our horses were unharnessed, and the vehicle, by the strenuous effort of half a dozen negroes, lifted on board. Then the horses, our own and several others, without much difficulty, jumped the space; but the cattle struggled, and backed, and plunged, with the most incorrigible perversity. Some charged back, and tried to escape up the hill; others plunged into the water; and one fine heifer was with difficulty saved from drowning. At last, after a great effort, much shouting, and woful confusion, cattle, horses, carriage, and pedestrians, were successfully shipped, but crowded to-

THE TENNESSEE AT CHATTANOOGA.

gether on the narrow flat with promiscuous disregard of class or species. Immense numbers of live-stock constantly traverse the road along the Tennessee, and cross by the ferry described into Chattanooga. All day long the cry is, "Still they come!" Chattanooga is an extensive cattle-market, being the source of supply for a large portion of the cotton States.

The Tennessee road is of historic interest, as being the principal avenue during the recent war by which supplies were sent for the army in East Tennessee. Ceaseless trains of army-wagons wound over the rough, devious, and picturesque road. The Confederate sharp-shooters hung along the southern bank, and it was not uncommon for a sudden fusillade from the opposite hills to send death and consternation among the draught-animals and their drivers.

There is one feature of the Tennessee at Chattanooga that remains to be described. Under a high cliff near the ferry-landing may, at suitable season, be seen a number of flat-boats unloading their cargoes of grain or other produce from the upper waters of the Tennessee. Here is often a very stirring picture. Crowds of vehicles are receiving grain; there is the bustle of loading and unloading, the clamor of many voices, the noisy vociferation of the negro drivers, altogether making up a scene of great animation. These flat-boats come mainly far up through the Clinch or the Powell River, from the northern border of Tennessee, and the southern counties of Virginia, bringing corn, wheat, and bacon. A striking characteristic of their construction is their ponderous stern-oars, which often reach a hundred feet in length. Floating with the current, these oars are only needed as rudders, and the necessity of their great length is not obvious. The flat-boatmen of the Tennessee are not, like those of the Mississippi, notorious as "hard characters." They do not pursue the vocation as a business, but are mostly farmers, who, once a year possibly, bring down their harvests, and perhaps those of their neighbors, to market. We found them, while rustic in manner, polite, affable, and intelligent. One notable feature of this busy scene was the apparently friendly manner in which whites and blacks labored together. There was some little merry chaffing of each other, and that was all. As each boat included both colors in the composition of its crew, and among the teamsters was every shade of hue, there was abundant opportunity for the display of class hatreds if they had existed.

There would seem to be favorable occasion for the employment of capital and labor in this section of country. Chattanooga is a great railroad centre; it is on the main line of travel between the North and the South; and it must, in the nature of things, develop into an important place. Capital is needed, which, with fresh energy and a more varied industry, would soon give a marked impulse in the development of a section rich in natural resources.

RICHMOND, SCENIC AND HISTORIC.

WITH ILLUSTRATIONS BY HARRY FENN.

IN one of the drawing-rooms of the Century Club, New York, there may be seen a painting of a quaint old mansion of red brick, architecturally of the reign of Queen Anne, one wing of which stands only in its charred timbers and blackened walls. This mansion is situated on the left bank of the James River, and, a century and a half ago, was the stately dwelling of the "Hon. William Byrd, of Westover, Esquire." It was occupied for some time during the late civil war by the Federal troops (when the painting in possession of the Century Club was executed), and the name, Westover, will be freshly recalled in connection with the operations in Virginia during that struggle.

There were three William Byrds, of Westover, grandfather, father, and son, each one of whom makes a figure in the colonial history of Virginia, but it was the second of the name and title to whom reference is made above—a man of many shining traits of character and of imposing personal appearance, as we know from contemporary records and from the full-length portrait of him, in flowing periwig and lace ruffles, after the manner of Vandyck, which is still preserved at Lower Brandon. He had an immense

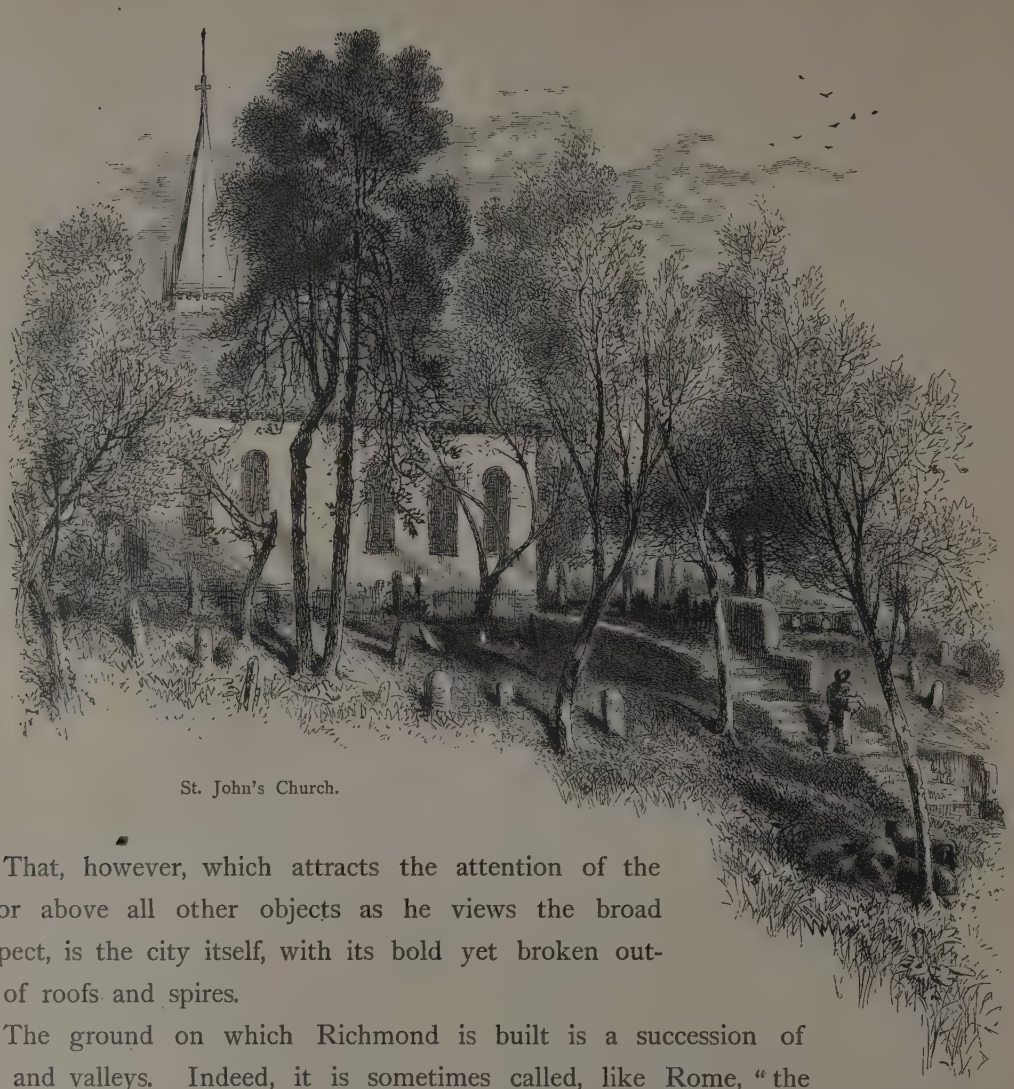
estate, and lived profusely on its revenue for many years in England; he was the friend, as the inscription on his tomb at Westover tells us, of the learned and illustrious Charles Boyle, Earl of Orrery, and was elected a Fellow of the Royal Society; he contributed a paper to the Philosophical Transactions, and he left behind him a considerable mass of papers, known as the Westover Manuscripts, one of which is a delightful history of the dividing-line between Virginia and North Carolina. From this narrative we learn—a fact not mentioned in his epitaph—that he was the founder of Richmond.

On the 19th day of September, in the year 1733, he says, on their return from the boundary expedition, one Peter Jones and himself laid out two towns or cities, one on the Appomattox and the other on the James River, twenty-two miles apart. The one they called Petersburg, from the baptismal name of the Jones of the period, and not in compliment to Peter the Great; and the other they called Richmond, from a resemblance, real or fancied, in its site with soft hills, and far-stretching meadows, and curving sweep of river, lost to view at last behind glimmering woods, to the beautiful English town in Surrey. Whatever hopes they may have indulged of the future greatness of these Virginian towns, hopes as yet unfulfilled, it probably did not occur to Colonel the Hon. William Byrd or to Peter Jones, his companion, that around these sites military engagements were to be fought as memorable as Pultowa or Malplaquet, and that Petersburg and Richmond would become as famous in the history of sieges as Saragossa or Belgrade.

Colonel Byrd did not live to see Richmond attain unto any considerable size, for the town was not established by law until 1742, and he died only two years later. A few warehouses for the storage and shipment of tobacco were built first of all; then an irregular and scattering collection of houses for trade grew up around them; and on the hills overlooking the settlement arose the dwellings of a few rich planters and the thriving Scotch and English merchants who had established themselves at the place. But the fine town-house of Madame Rachel Esmond Warrington was fixed there by Mr. Thackeray several decades too soon. Richmond, indeed, had no importance until it supplanted Williamsburg as the seat of the State government in 1779, and so little prepared was it for defence in war that it was given up to the British troops, in Arnold's descent upon Virginia, without the firing of a gun, and Lieutenant-Colonel Simcoe, of the Queen's Rangers, rode into it with barely a show of opposition.

Immediately after the War of the Revolution, sanguine expectations were entertained that Richmond would soon become, not only the seat of a large trade, but a centre of learning and science. Commercial relations were established with London, and vessels of small tonnage made passages of sixty days from the wharves of Richmond to the pool of the Thames. Before many years an India-house was built, with the vague idea that the fabrics and spices of the East would be brought from Bombay and Calcutta direct to the capital of Virginia. But polite learning was to keep pace with material

RICHMOND, FROM HOLLYWOOD.



St. John's Church.

That, however, which attracts the attention of the visitor above all other objects as he views the broad prospect, is the city itself, with its bold yet broken outline of roofs and spires.

The ground on which Richmond is built is a succession of hills and valleys. Indeed, it is sometimes called, like Rome, "the seven-hilled city," and, in approaching from almost any direction, it produces upon the stranger the imposing effect of a large and populous capital. Nor will he be disappointed by his subsequent experience, for he will still find the city a place of interest as the social and political centre of Virginia.

From the period of the Revolution down to the present time the flower of the country-people have been in the habit of spending here a considerable portion of the year, while the sessions of the Legislature and the courts drew together many of the most brilliant intellects of the land. In 1861 still greater prominence was given to Richmond by its selection as the capital of the Southern Confederacy. It became the home of the Southern leaders and the resort of the officers of its armies, while the net-work of intrenchments that almost encircled the city and the battles fought in the neighborhood tell of the obstinacy with which it was defended as the key-stone of the cause. In April, 1865, when the Confederate forces evacuated their positions, nearly one thou-

sand houses, including property to the value of eight million dollars, were destroyed by fire. Since then, however, Richmond has nearly recovered from her misfortune, and there are now visible but few traces of the great conflagration.

Chief among the public buildings, and one that may be said to belong to the post-Revolutionary period, is the Capitol, a structure which lifts itself above all other buildings as from an Acropolis, and has, indeed, an imposing effect, which is not wholly lost when one gets near enough to see the meanness of its architectural details and the poverty of its materials. The Maison Carrée at Nismes, in France, was selected by Mr. Jefferson as the model for the structure, but so many alterations were made in this model that the Capitol resembles the Maison Carrée about as much as the Hall of Records in New-York City resembles the Temple of Wingless Victory. For all the purposes of the picturesque, however, the Capitol serves as well in the prospect from Hollywood as if it were the Parthenon restored. At the distance of two miles the stucco of its exterior glitters in the sunlight, like marble, and there is a symmetry in its proportions which Mr. Ruskin himself would acknowledge, harrowing as the building might be to his æsthetic soul when he came to examine it.

It stands on the brow of what is known as Shockoe Hill, in the centre of a public square of about eight acres, which, being beautifully laid out, is a favorite place of resort for both citizens and strangers, who find in its shady recesses and the music of its fountains a grateful contrast to the dust and bustle of the streets. The building is of the Græco-composite order, adorned with a portico of Ionic columns, and the view from it is extensive, varied, and beautiful. The entrances are on the two longer sides, and lead to a square hall in the centre of the building, surmounted by a dome. In the centre of this hall is the famous marble statue of Washington, bearing this inscription:

"*Fait par Houdon, Citoyen Français,* 1788."

On the pedestal is the honest and affectionate inscription which follows:

"The General Assembly of the Commonwealth of Virginia have caused this statue to be erected as a monument of affection and gratitude to

GEORGE WASHINGTON,

who, uniting to the endowments of the Hero the virtues of the Patriot, and exerting both in Establishing the Liberties of his Country, has rendered his name dear to his Fellow Citizens, and given the World an immortal example of true Glory. Done in the year of

CHRIST

One Thousand Seven Hundred and Eighty Eight and in the year of the Commonwealth the Twelfth."

The statue is clothed in the uniform of an American general during the Revolution, and is of the size of life. In one of the niches of the wall is a marble bust of Lafayette. Among other objects of interest here, is an antique English stove covered with ornamental castings and inscriptions, and dating far back beyond the Revolution. It was used to warm the old Virginia House of Burgesses at Williamsburg, in colonial times, and still holds its place in the present hall as the centre of legislative discussion and gossip, as it no doubt was more than a hundred years ago. The library contains many historic relics and valuable old pictures, and indeed the entire building is rich in associations which make the place seem almost sacred. Here Aaron Burr was tried for treason before John Marshall; here Lafayette was received by his old companions in the cabinet and the field; here the memorable Convention of 1829–'30 held its sessions, among whose members were Madison, Monroe, Marshall, John Randolph, Leigh, and many other

The James, above Richmond.

The James, from Mayo's Bridge.

men of national fame; and here, at a later period, Stonewall Jackson lay in his coffin, with the new flag of the Confederate States (then first used) for his pall.

A few rods distant from the Capitol stands the celebrated equestrian statue of Washington, by Crawford. It consists of a bronze horse and rider of gigantic size, artistically poised upon a pedestal of granite, and surrounded by immense bronze figures of Patrick Henry, Thomas Jefferson, John Marshall, George Mason, Thomas Nelson, and Andrew Lewis. Each of these statues is a study in itself, as a specimen of the sculptor's genius, and as an almost "speaking likeness" of the original. Henry is represented in the act of delivering an impassioned address; Jefferson, with pen in hand, and thoughtful brow, appears the statesman; Marshall wears the dignity and firmness of the great judge; while the noble form of General Andrew Lewis, arrayed in the hunting-costume of the pioneer, recalls the romance and daring of early days. On smaller pedestals are civic and military allegorical illustrations, also in bronze; and, altogether, the monument is perhaps the most imposing in America.

In another portion of the Capitol grounds is a marble statue of Henry Clay, of life-size, which well deserves the attention of the tourist as a faithful work of art.

The prominent public buildings of Richmond are substantial, and in most instances handsome specimens of architecture. The City Hall, Custom-House, Governor's Mansion, Penitentiary, Medical College, and State Armory, are severally worthy of a visit; while,

among the many churches, that which occupies the site of the ill-fated theatre destroyed by fire in 1811, when the Governor of the State and sixty others perished in the flames, is the most notable. The "Old Stone House" is cherished in the affections of the citizens of Richmond as the first dwelling erected within the city limits. "It was occupied, when I visited it," says Lossing, in his "Field-Book of the Revolution," "by Mrs. Elizabeth Welsh, whose great-grandfather, Jacob Ege, from Germany, built it before Byrd's warehouse was erected. It was owned by Mrs. Welsh's father, Samuel Ege, who was a commissary in the American army during the War of the Revolution. Washington, Jefferson, Madison, and Monroe, have all been beneath its roof. Mrs. Welsh informed me that she well remembers the fact that Monroe boarded with her mother while attending the Virginia Convention in 1788."

At the remotest point of the landscape in the drawing of "Richmond from Hollywood" may be seen a white spire on the summit of a hill. This is the old parish-church of St. John's, Henrico, probably the first building of note that was erected within what are now the limits of the city, then standing solitary in the midst of the native forest which overlooked the small warehouses and tobacco-sheds at the head of navigation. At what exact period St. John's Church was built, the local historians do not inform us; but there are tombs in the burial-ground bearing date 1751, and probably no interment was made there until after parish services were regularly performed in the building itself. Mr. Fenn's beautiful sketch presents it exactly as it now appears, and gives that side which is oldest in construction. Originally, it was without architectural pretensions of any kind; but, thirty years or more ago, it was modernized by the erection of a tower, and enlarged by an addition joining the ancient part at right angles. During the late civil war the tower fell in a high wind, and has been replaced by the spire which is seen in the drawing. The old church was far less imposing, without and within, than Trinity at Newport, which it resembled in the general arrangement of its pews, and in an old sounding-board that once stood above the pulpit, but yielded at last to the progress of decay. The associations of the building are of the most stirring and interesting character. Here assembled, on the 20th of March, 1775, the Second Convention of Virginia, which was called to determine the question of peace or war between the colony and the crown, and which gave to the Old Dominion the honor of organizing the first plan of resistance to British tyranny. The deliberations of this convention form a striking chapter in the history of the American Revolution, and are familiar to all educated persons in the United States. The body contained a large number of men who were destined to become illustrious in the annals of the Commonwealth and the country. Among them were Peyton Randolph and Richard Bland, George Wythe and Richard Henry Lee. The delegate from Albemarle was Thomas Jefferson, and the delegate from Fairfax was George Washington. But the leading spirit of the convention was Patrick Henry, and the walls of this old church gave back the animating strains of his eloquence,

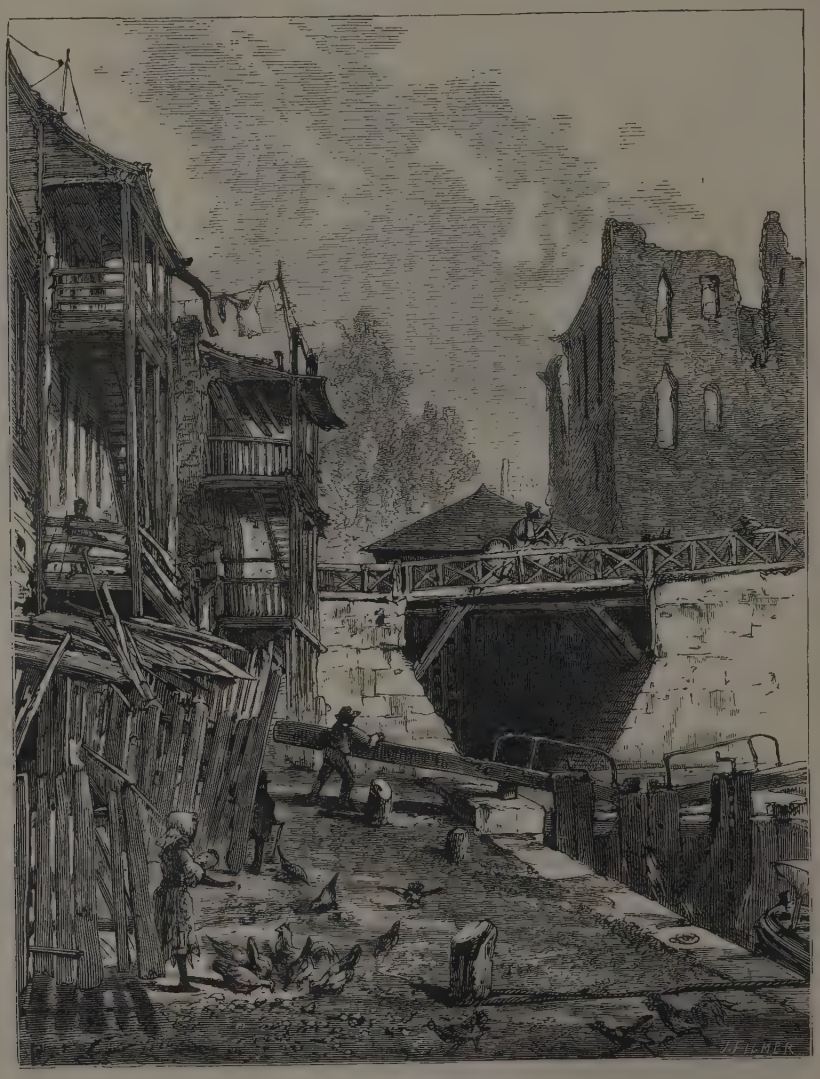
Rapids in the James.

as, rising to the full height of his argument, he uttered the war-cry of the Revolution: "Is life so dear or peace so sweet as to be purchased at the price of chains and slavery? Forbid it, Almighty God! I know not what course others may take, but, as for me, give me liberty or give me death!"

The populous graveyard around the church has long since been disused for interments, and the tombs themselves are crumbling into ruin, which the deep grasses and running ivy of the spot half conceal. On some the inscriptions are almost illegible, and it is plain, from the neglect of all, that few descendants of the dead that repose beneath them now remain among the inhabitants of Richmond. None of the great historic names of the Commonwealth are to be found among these tombs, and the thoughts they suggest are such as were excited in the mind of Gray at Stoke Pogis, which the "Elegy" so beautifully and effectively embodies in verse. The sleepers were the undistinguished forefathers of the hamlet mostly, of various races and nationalities, and, though three generations are represented in this city of silence and forgetfulness, quite as many lie here who prayed for King George in the church near by as for the President of the United States in later times.

From the hill on which the church stands, and indeed from most of the

hills about Richmond, the James River is in view for several miles of its course, and lends much to the attractiveness of the prospect. Above the city, in the rapids which for six miles tumble over a rocky bed, we see whence is derived the water-power that animates the mills, and how art has overcome the obstructions of Nature by means of a canal which opens the navigation of the river above the falls. Below the bridge, the scene is more



Scene on the Canal.

peaceful, and the tranquil surface of the water reflects the steadily-increasing commerce of the capital. Barks and steamers ply regularly between its sister-ports, and the white gleam of their sails and the dark smoke of their furnaces, though far from fulfilling the visions of the builders of the India-house of which we have spoken, give a charm to picturesque surroundings that will always be worthy of the pencil of the artist. The

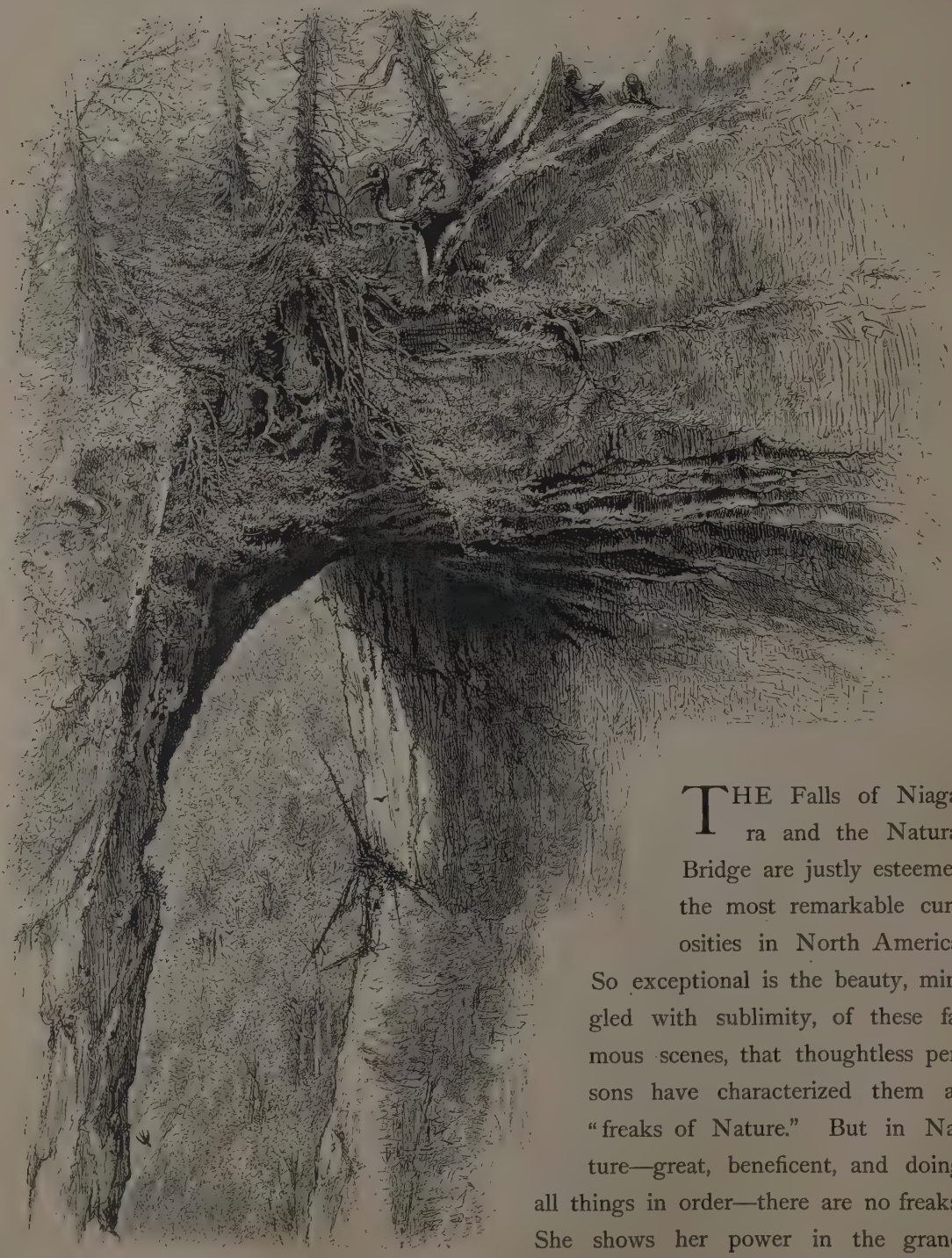
accompanying illustrations correctly present various aspects of the river; but it is among the rapids, or just below them, that Mr. Fenn has happily embraced the upward and the downward view. The covered bridge, which a train of cars is about entering, seen in the drawing of the rapids, is that of the Richmond and Danville Railroad, and the frames which appear above the water are the fish-traps which are rebuilt every spring to catch the shad as they come over the falls. The unwary fish swims with the swift current right into the trap, and is carried by its force out of his native element, high and dry upon the strips of planking, there to remain until the owner of the trap removes it, unless stolen at night by the prowling human shad-thief, or the predatory raccoon which inhabits the islands in the stream. Once in the trap, the shad cannot possibly go back, and, in seasons when a good run of this fish ascends the river, large numbers are thus caught for the Richmond market. It may be supposed that the navigation of a river so rapid and so rocky as the James at this point, is difficult, but the negro boatmen have great dexterity in poling and paddling their little skiffs across from island to island; and the small steam-yacht, which lies under the island's bank in the picture, does no more than shoot the torrent into the deeper and smoother water lower down.

The canal, which is seen in the last of Mr. Fenn's collection of drawings, is connected with tide-water by a series of locks, with an aggregate lift of ninety-six feet. Two of these locks on the highest level constitute the central part of a sketch which, at first glance, looks as if it were designed to set before us a quaint, old, tumble-down nook or corner of some European city. Upon examination, however, one sees the African element of the population in such force, tending the lock, feeding the poultry, and driving the team across the bridge, as to determine the locality in a Southern town of the United States. One cannot help recognizing in this sketch how much more effective in the hands of the artist is dilapidation than tidiness, and a ruin than a perfect structure. The ramshackle porches of the negro tenements here have a higher effect than would a neat row of white-painted houses with green blinds, in a well-kept New-England village, and the broken walls of the warehouse (destroyed by the fire of April, 1865, and never rebuilt) are more picturesque than would be the smooth front of a factory that might give occupation to five hundred operatives.

Richmond retains yet, in the marks of her great conflagration, much of that undesirable picturesqueness that belongs to ruins. But such is the beauty of its site, and the charm of its landscape, that, when not one ragged wall or cruel chasm shall be left to suggest the ravage it has undergone—when the whole river-margin along the rapids shall have been made vulgar and noisy (and profitable) by lines of factories, and Richmond shall become the great manufacturing city of the South—even then it will tempt the wandering artist to take out his portfolio and sketch the outlines of its hills, and the tumult of its leaping waters.

THE NATURAL BRIDGE, VIRGINIA.

WITH ILLUSTRATIONS BY HARRY FENN.



THE Falls of Niagara and the Natural Bridge are justly esteemed the most remarkable curiosities in North America. So exceptional is the beauty, mingled with sublimity, of these famous scenes, that thoughtless persons have characterized them as "freaks of Nature." But in Nature—great, beneficent, and doing all things in order—there are no freaks. She shows her power in the grand

cataract, spanned with its rainbow, and in the dizzy arch of the Natural Bridge, as in the daisy and the violet she shows her grace and beauty.

The Natural Bridge, the character and formation of whose upper portion are displayed in the first of the accompanying sketches, has been, from about the middle of the eighteenth century, an object of curiosity and admiration in Europe as well as in America. Whatever traveller came to the Western World, to compare its natural grandeur with the grandeur of art and architecture in the countries he had left, went first, in the North, to the Falls of Niagara, and, in the South, to the world-famous bridge. Among these may be mentioned the courtly and distinguished Marquis de Chastellux, major-general in the French Army and member of the Institute, who in 1781 visited the place, and from whose rare volumes we present a few paragraphs which may interest the reader.

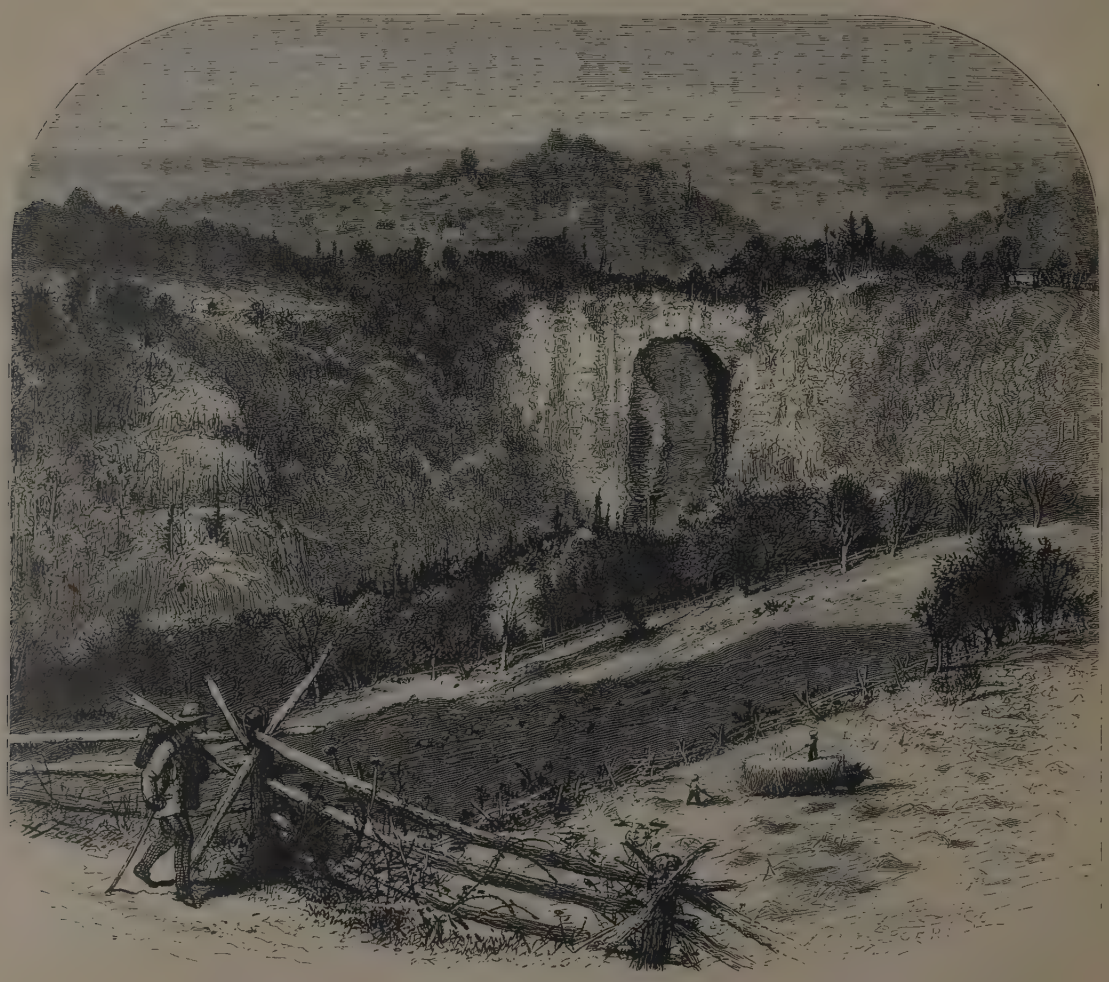
"Having thus travelled for two hours," writes the marquis, "we at last descended a steep declivity, and then mounted another. . . . . At last my guide said to me: 'You desire to see the Natural Bridge—don't you, sir? You are now upon it; alight and go twenty steps either to the right or left, and you will see this prodigy.' I had perceived that there was on each side a considerable deep hollow, but the trees had prevented me from forming any judgment or paying much attention to it. Approaching the precipice, I saw, at first, two great masses or chains of rocks, which formed the bottom of a ravine, or, rather, of an immense abyss. But, placing myself, not without precaution, upon the brink of the precipice, I saw that these two buttresses were joined under my feet, forming a vault of which I could yet form no idea but of its height. After enjoying this magnificently-tremendous spectacle, which many persons could not bear to look at, I went to the western side, the aspect of which was not less imposing, but more picturesque. This Thebais, these ancient pines, these enormous masses of rocks, so much the more astonishing as they appear to possess a wild symmetry, and rudely to concur, as it were, in forming a certain design—all this apparatus of rude and shapeless Nature, which art attempts in vain, attacks at once the senses and the thoughts, and excites a gloomy and melancholy admiration."

Such are the terms in which the gallant marquis describes his first sensations, when, as yet, the view from the summit was all he had seen. He goes on to say:

"But it is at the foot of these rocks, on the edge of a little stream which flows under this immense arch, that we must judge of its astonishing structure. There we discover its immense spurs, its back-bendings, and those profiles which architecture might have given it. The arch is not complete; the eastern part of it not being so large as the western, because the mountain is more elevated on this than on the opposite side. It is very extraordinary that at the bottom of the stream there appear no considerable ruins, no trace of any violent laceration which could have destroyed the kernel of the rock and have left the upper part alone subsisting; for that is the only hypothesis that

can account for such a prodigy. We can have no possible recourse either to a volcano or a deluge, no trace of a sudden conflagration or of a slow and tedious undermining by the water."

The point here touched upon is one of the most interesting, in a scientific view, connected with this famous curiosity. The marquis, it will be seen, declares his conviction that the "prodigy" was neither caused by a volcanic upheaval, a conflagration burn-



The Natural Bridge and its Surroundings.

ing in the heart of the rock-ribbed mountain, nor by the attrition of water slowly wearing away the stubborn limestone. These views are supported by men of science, as the following paragraphs will show. They are taken from the memoir of the Baron de Turpin, an engineer of ability, sent by the Comte de Rochambeau to measure the great structure:

"The mass of rock and stone which loads this arch," says the baron, "is forty-nine feet solid on the key of the great centre, and thirty-seven on that of the small

one; and, as we find about the same difference in taking the level of the hill, it may be supposed that the roof is on a level the whole length of the key. It is proper to observe that the live rock continues also the whole thickness of the arch, and that on the opposite side it is only twenty-five feet wide in its greatest breadth, and becomes gradually narrower. The whole arch seems to be formed of one and the same stone; for the joints which one remarks are the effect of lightning, which struck this part in 1779. The other head has not the smallest vein, and the intrados is so smooth that the martins, which fly around it in great numbers, cannot fasten on it. The abutments, which have a gentle slope, are entire, and, without being absolute planes, have all the polish which a current of water would give to unhewn stone in a certain time. The four rocks adjacent to the abutments seem to be perfectly homogeneous, and to have a very trifling slope. The two rocks on the right bank of the rivulet are two hundred feet high above the surface of the water, the intrados of the arch a hundred and fifty, and the two rocks on the left bank a hundred and eighty."

The baron then proceeds, as though weary of his "great centres," "intrados," and other technicalities, to burst forth with:

"If we consider this bridge simply as a picturesque object, we are struck with the majesty with which it towers in the valley. The white-oaks which grow upon it seem to rear their lofty summits to the clouds, while the same trees which border on the rivulet appear like shrubs."

This exhibition of sentiment, however, appears to exhaust the baron's stock, and he returns to his better-loved science, adding:

"We see that these rocks, being of a calcareous nature, exclude every idea of a volcano, which, besides, cannot be reconciled with the form of the bridge and its adjacent parts. If it be supposed that this astonishing arch is the effect of a current of water, we must suppose, likewise, that this current has had the force to break down and carry to a great distance a mass of five thousand cubic fathoms, for there remains not the slightest trace of such an operation."

What, then, was the mystery of the origin of this celebrated structure? Science is powerless in face of the wonder, and perhaps, after all, the conclusion of De Chastellux is the only one attainable—that "it is to the labor only of the Creator that we owe the magnificent construction of the Natural Bridge"—to which he adds: "The opinion of the Comte de Buffon, whom I have since consulted, has left me no doubt upon the subject."

From this strictly scientific, but, we think, suggestive and interesting, view of the great curiosity, we pass to details and circumstances connected with it, calculated, perhaps, to interest in a larger degree the general reader.

Mr. Fenn's second drawing furnishes a distant view of the bridge, the surrounding country, and objects in its vicinity. It will recall, doubtless, to many persons, agreeable recollections of the landscape which saluted their eyes as they first drew near the place

—and the names of such are legion, for the spot has been, for more than half a century, the resort of parties led by a desire to explore the beauties of the romantic scene. Of the daring of some of these visitors, in climbing, or venturing to the brink of the precipice, we shall give one or two instances, kept alive by tradition. Among these traditions, the most thrilling is that of the unshrinking nerve displayed by Miss Randolph, a young *Virginienne*, a great belle of her time, which was the early portion of the present century. The young lady had ridden, with a gay party of youthful maidens and gallant cavaliers, to the bridge, and reached it on a beautiful evening of summer. Miss Randolph is said, by those who knew and remember her, to have been a young lady of surpassing loveliness—tall, slender, with sparkling eyes, cheeks all roses, and noted for her gayety and mirthful *abandon*. Reaching the summit of the bridge, the party dismounted, cautiously approached the brink, fringed with trees growing among the rocks, and gazed into the gulf beneath. Of the terrifying character of the spectacle, President Jefferson's words will give some idea:

"Though the sides of the bridge are provided, in some parts, with a parapet of rocks," he says, "yet few men have resolution to walk to them and look over into the abyss. You involuntarily fall on your hands and feet, creep to the parapet, and look over it. Looking down from this height about a minute gave me a violent headache; the view is painful and intolerable."

Reaching this dizzy brink, the party of young ladies and gentlemen gazed below, when one of the gallants, pointing to the broken stump of a huge cedar which had once towered aloft upon a jagged abutment, separated by an intervening cleft from the main structure, expressed his conviction that no human being lived sufficiently daring to stand erect upon it. A gay laugh echoed the words, a silken scarf brushed by him, and the whole party uttered a cry of terror—Miss Randolph, at one bound, had reached and now stood erect upon the dizzy pinnacle. Tradition relates that her companions looked at her, white and speechless, as so many corpses. Her death seemed certain. A wild spirit of bravado had given her courage for this terrible proceeding; but, perched thus on her slight footing above the frightful abyss, she must lose her nerve, grow dizzy, and be hurled upon the rocks beneath—the beautiful being of a moment since—a mass of mangled and unrecognizable flesh and bones. For an instant, the daring young lady stood erect, riding-whip in hand, her scarf floating, her eyes sparkling with triumph; then, at a single bound, she regained her former position, and, with a gay laugh, asked if any gentleman could do as much. Tradition declares that, despite their gallantry, the youthful cavaliers exhibited their good judgment by declining.

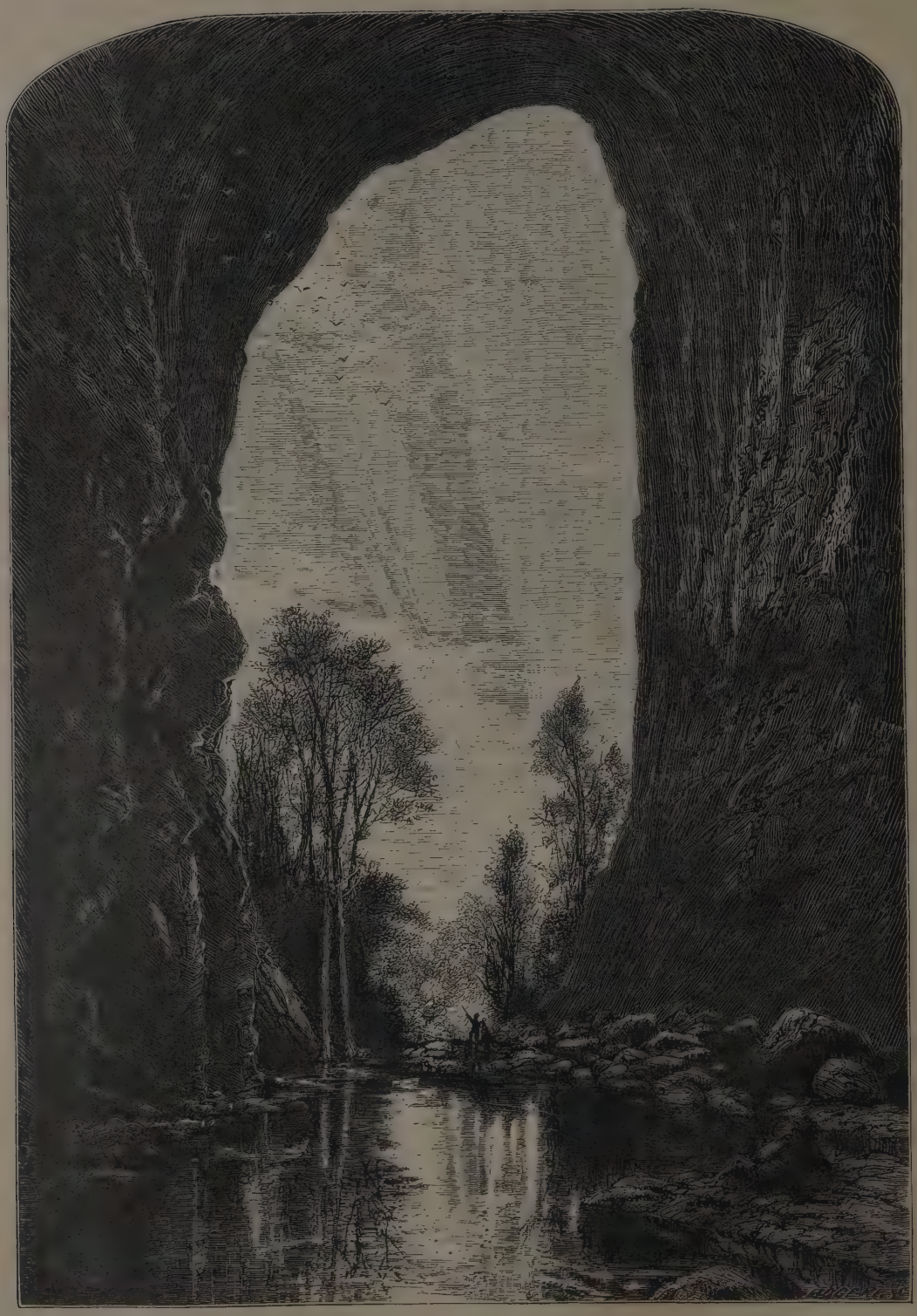
The most striking view of the Natural Bridge is that from below, and no better hour could be selected than that fixed upon by Mr. Fenn. As the sun rises and flashes its splendors through the gigantic arch, the scene becomes one of extraordinary beauty and sublimity—beauty from the exquisite flush which spreads itself over rocky mass and

stately fir, over pendent shrub, and the fringe of evergreen; and sublimity from the well-nigh overpowering sentiment which impresses the mind in presence of the mighty arch of rock, towering far above, and thrown as by the hand of some Titan of old days across the blue sky, appearing both above and beneath. It has been well said that no one who has witnessed this extraordinary spectacle has ever forgotten it.

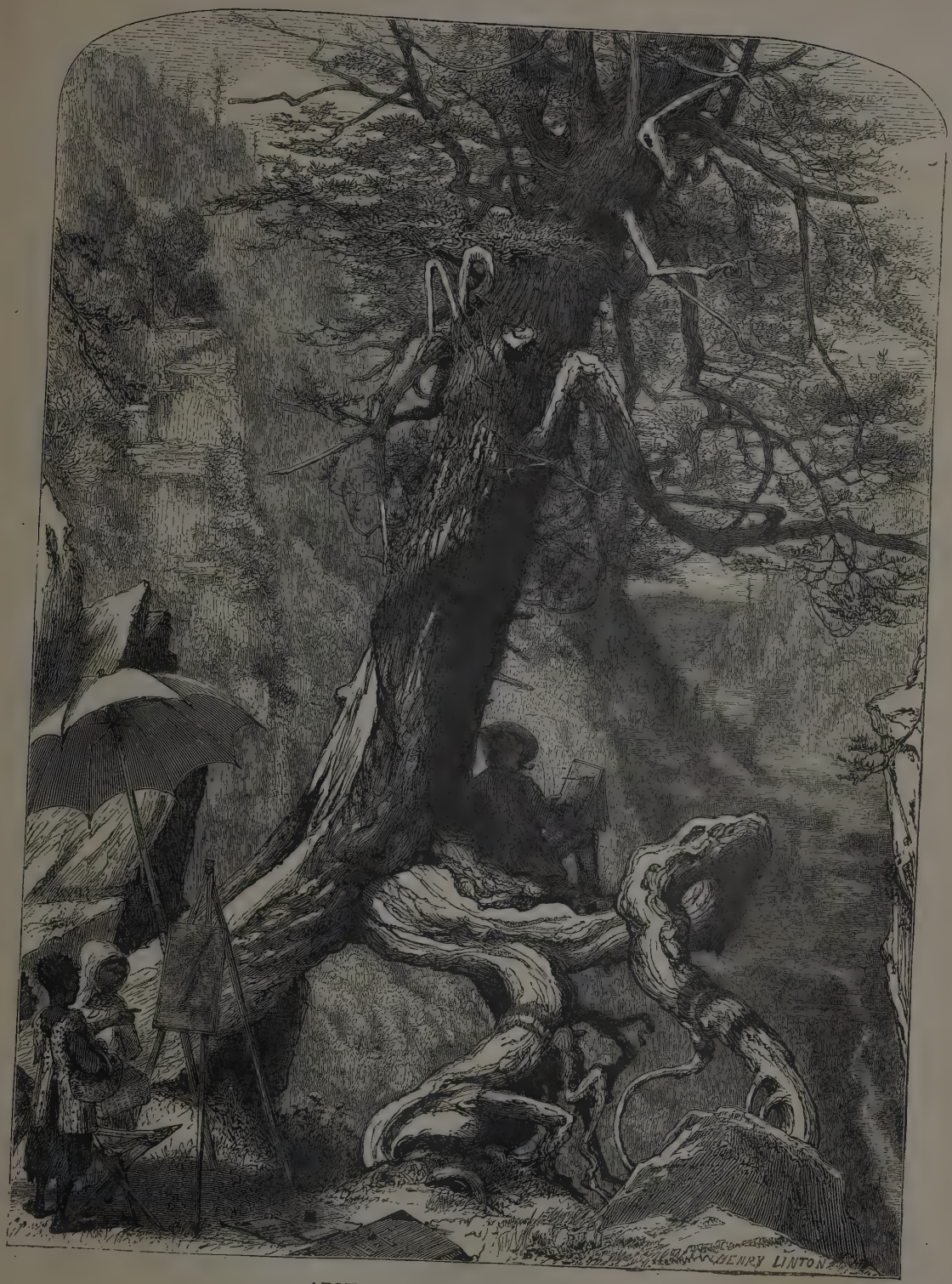
With the brilliant drawing of Mr. Fenn before his eyes, the reader would only be wearied by any description of the exquisite scene which it represents. The grandeur and serene loveliness of the spectacle are sufficiently indicated—the gentle stream which passes with a murmur from its hiding-place in the bosom of the hills—the lengthening vistas, cool and soft, and bathed in dawn—the silent mountains—and, in the midst of all this exquisite beauty, the great soaring arch, with its jutting buttresses and fringes of the evergreen pine, the shaggy eyebrows of the giant. They dwindle these heavy-headed evergreens into little fringes only—even that picturesque monarch, represented in the second drawing of Mr. Fenn, on the summit of the bridge, shows scarce so large as the spray of ferns and cedar held in the hand of a girl! There is excellent reason, indeed, why the loftiest forest-trees, proudly raising their heads to heaven, and affording a resting-place for the eagle, should thus shrink in dimensions. From the summit to the surface of the stream below is two hundred and fifteen feet; and thus the Natural Bridge is fifty-five feet higher than Niagara.

It remains only, before terminating our brief sketch of this celebrated curiosity, to speak of the hazardous attempts, made by more than one person, to climb the rocky sides of the great arch and reach the summit. This has never yet been done, but a considerable distance has been attained by venturesome climbers, who have recorded their prowess by cutting their names on the surface, at the highest point reached by them. High up among these, it is commonly reported, may be found the name of no less a personage than George Washington, who, strong, adventurous, and fond of manly sports, was seized, like many others before and after him, with the ambition to ascend the precipice and inscribe his name upon the face of the rock.

The highest point ever reached by any one of these adventurous explorers is said to have been attained by Mr. James Piper, at the time a student of Washington College, and subsequently a State senator. It was about the year 1818, when, with some of his fellow-students, Mr. Piper visited the bridge, descended to the foot of the precipice, and determined to ascertain to what height it was possible for a human being to ascend by means of inequalities on the surface, the assistance of shrubs, or otherwise. He accordingly commenced climbing the precipice, and, taking advantage of every ledge, cleft, and protuberance, finally reached a point which, to his companions far beneath, seemed directly under the great arch. He was far above the names cut on the stone—fully fifty feet above that of Washington—and, standing upon a ledge, which appeared to his terrified fellow-students but a few inches in width, shouted aloud, waving one hand in triumph,



UNDER THE NATURAL BRIDGE.



ABOVE THE NATURAL BRIDGE.

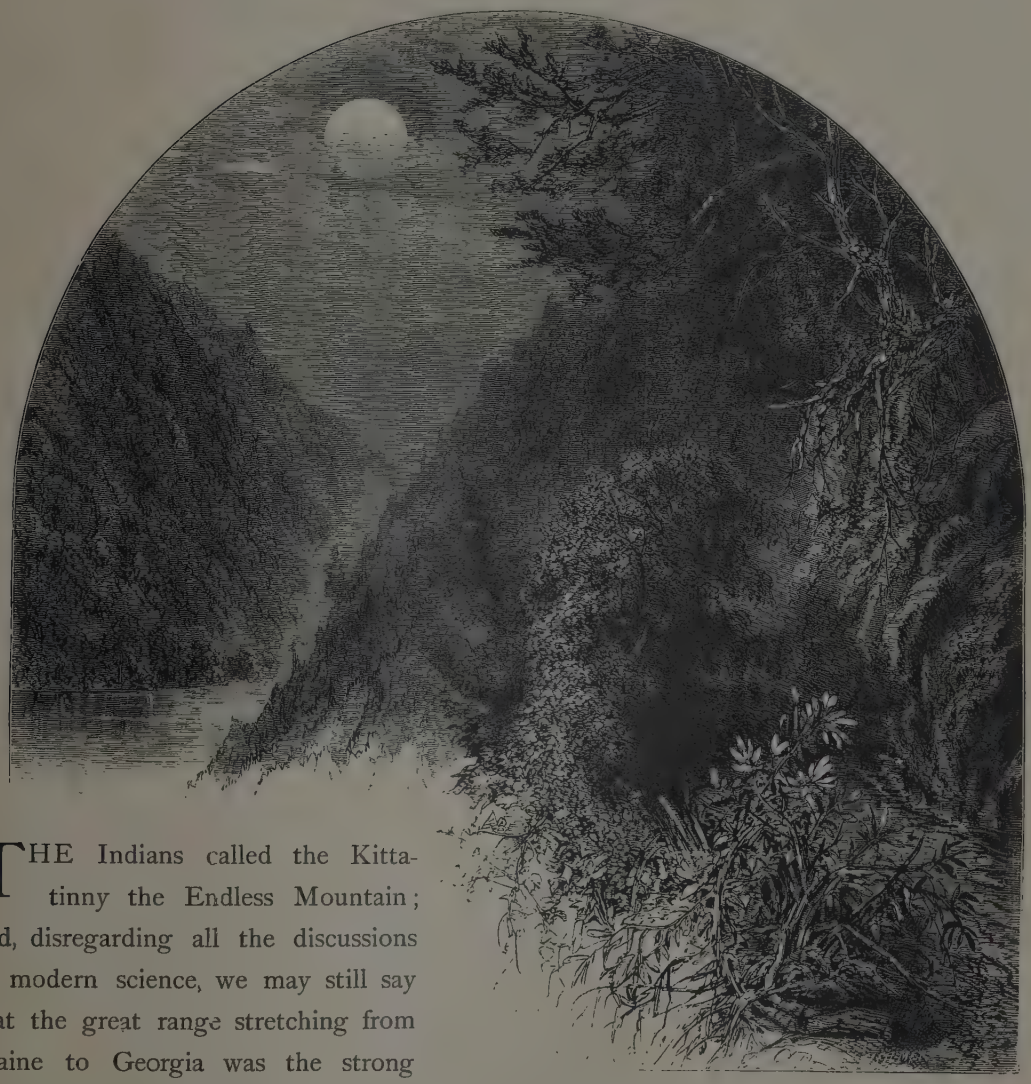
while with the other he clung to the face of the precipice. They shouted back to him, begging him for God's sake to descend, but he only replied by laughter. They then saw him continue the ascent, clinging to every object at hand, until he reached a cleft almost directly beneath the cedar-stump which we have mentioned as the scene of Miss Randolph's perilous adventure. His ambition was not yet satisfied, however. He had not ascended the rock to inscribe his name upon it, but with the daring design of immortalizing himself by mounting from the bottom to the top of the Natural Bridge. He accordingly continued his way, working his toilsome and dangerous passage through clefts in the huge mass of rock. These were just sufficient, in many places, to permit his body to pass; and huge roots from the trees above, protruding through splits in the mass, curled to and fro, and half obstructed the openings. With unfaltering resolution, and not daring to look into the hideous gulf beneath him, the young man fought his way on, piercing by main force the dark clefts, crawling along narrow ledges, springing from abutment to abutment, until finally he stopped at an elevation of *one hundred and seventy feet* from the earth below. Here he was seen to look upward, but he did not move. His heart had failed him. Instead of designing any further ascent, his only ambition now was plainly to descend in safety, if possible, from his frightful perch. To look beneath would have been certain death. His head would have turned at the first glance, and, losing his footing on the narrow ledge, which he just clung to, his body would have been dashed to pieces on the rocks.

Under these circumstances the young gentleman acted with a nerve and presence of mind highly honorable to the force of his character. He slowly and cautiously divested himself first of one of his shoes, and then the other, next drew off his coat, and these articles he threw from him into the gulf beneath, without daring to look in the direction in which they fell. Then, clinging close to the face of the precipice, and balancing his body carefully as he placed each foot down, and raised each one up, he tottered along inch by inch, hanging between life and death until he reached a friendly cleft. Here pausing for a moment to brace his nerves, he continued his way in the same cautious manner, followed by the eyes of his pale and terrified friends; when, disappearing in a cleft, he reappeared no more. A cry rose from beneath; he was lost, it seemed—must have fallen into one of the huge fissures and been dashed to pieces. His friends had given him up, and agony had succeeded the long suspense, when suddenly, from behind a clump of evergreens, extending like a screen across the narrow opening between two towering rocks, appeared the young student—safe, sound, and smiling, after his perilous feat, during which he had stood face to face with the most terrible of deaths.

The Natural Bridge is in the southeastern corner of Rockbridge County, in the midst of the wild scenery of the Blue-Ridge region, and almost under its shadow upon its western side. It is reached from Lexington, fourteen miles distant, by stage, and from Lynchburg, by canal-boat, thirty-six miles.

THE DELAWARE WATER-GAP.

WITH ILLUSTRATIONS BY GRANVILLE PERKINS.



THE Indians called the Kittatinny the Endless Mountain; and, disregarding all the discussions of modern science, we may still say that the great range stretching from Maine to Georgia was the strong backbone of the thirteen colonies, that made them stand erect among the nations. In such union, indeed, there is strength; and grandeur and beauty invest the whole—whether, as the Green Mountains, giving its euphonic name to Vermont, or when the snow-capped peaks become the White Mountains of New Hampshire; whether Dutched into Kaatskill, or when, in Pennsylvania and the more Southern States, the even tinting of the forest-clad sides renames them, as, melting softly into the atmosphere, they are as blue as the circumambient air.

In Pennsylvania the range is peculiarly symmetrical, and the richly-wooded sides and regular outline well entitle it to the name of Blue Ridge, given to it, in popular parlance, by the early settlers. The uniformity of character is still further illustrated in this State by the almost equal intervals at which the barrier is broken by the waters of the Delaware, Lehigh, Schuylkill, Swatara, and Susquehanna.

Pretty streams rise on the western declivity of the Catskills, and, quitting their mountain birthplace, wander toward the southwest until near the line of Pennsylvania they unite, and thence, as the mighty Delaware, move on in constantly-increasing volume, the fitting boundary of majestic commonwealths.

Near the junction of the three States of New York, New Jersey, and Pennsylvania, the river again approaches the mountains, and follows their western side through a succession of magnificent scenes, which, gradually increasing in grandeur, find a sublime culmination where the river turns abruptly into the mountain, which opens to give it passage into a defile, or cañon, called, in our prosaic vernacular, the Delaware Water-Gap. Thence forward the forms gradually soften from grandeur into grace, and the river, escaping from bluff, precipice, and rock, pursues its way through picturesque rolling lands toward the level of the seaboard.

The country north of the Blue Ridge and above the Gap bore the Indian name of Minisink, or "Whence the Waters are gone." Here a vast lake once probably extended; and, whether the great body of water wore its way through the mountain by a fall like Niagara, or burst through a gorge, or whether the mountains uprose in convulsion upon its margin, it is certain that the Minisink country bears the mark of aqueous action in its diluvial soil, and in its rounded hills, built of pebbles and bowlders.

Whether by upheaval or down-dropping, by slow friction or sudden disruption, the wound was made, rarely is seventeen hundred feet of Mother Earth's anatomy so laid bare to the eye, and the Gap furnishes especial temptations for geological speculation.

To the first settlers the mountains proved a troublesome barrier, and all intercourse to the southward necessarily passed through the natural gate-ways of the gaps; but the Delaware writhed its way through its cavernous passage with contortions too like those of the rattlesnakes that thronged upon the banks, and the dangerous pass was long avoided for the easier road through the Lehigh Gap, where the water-course of a pretty stream led to the head-waters of Cherry Creek, and a pleasant road followed its bank through the beautiful Cherry Valley, full of dimpling hills and fine orchards, among which stalwart men lived to a ripe old age upon the purest apple-whiskey. This Cherry Creek, running toward the north along the western side of the mountain, to join the Delaware just above the Gap, formed a natural road to Philadelphia, which by reason of its pleasantness long maintained its popularity. Nearly midway between the two rivers, Nature had also provided another gate-way in the Wind Gap, called, by the early Dutch settlers, "Die Wind Kaft," a sharp notch, which, descending almost to the base of the

DELAWARE WATER-GAP.

mountain, but not low enough for a water-passage, was only a pass for the winds. This route, early used, was the well-known road cut by General Sullivan and his army in 1779. These better routes caused the Gap of the Delaware to be left to the rattlesnakes for a long period, and it was not until the year 1800 that a serviceable road was made through it, by the exertions of the people of the neighboring country, for their own convenience.

The earliest history of the region is involved in obscurity; but, shortly after Hendrick Hudson, in his little Half-Moon, passed up the river that was thenceforth to bear his name, his enterprising countrymen founded settlements at Orange, afterward to be known as Albany, and at Esopus, since the historic city of Kingston. The pretty valleys leading to the southwest wooed these colonists to travel, and the Dutch, certainly at an early day, traversed the valleys of the Mamakating and Neversink to the land of the Minisink. Near the Gap were found mines of copper and iron, and "the mine-road" was soon opened, proving so available that, even as late as the year 1800, it was chosen by John Adams as the best route from Boston to Philadelphia.

Of these earliest Dutch immigrants little is positively known, and it is believed that some of those farthest advanced into the wilderness returned to safer and more friendly regions when the country, in 1664, fell into the hands of the English.

The religious persecutions in France, which compelled the Protestants to escape into Holland, were the remote cause of the introduction of French settlers into these forest-wildernesses. Among them, Nicholas Depuy, coming with the Dutch to Esopus, finally established himself a few miles above the Delaware Water-Gap. Two fertile islands in the river furnished him farming-ground, and he soon built upon the main-land a stone edifice, which, well known as a frontier fort during the long period of the Indian wars, is now a charming residence. Seated in the broad, spacious hall, a forward view leads through a lovely lane of greenery to the base of a high mountain; and then, glancing backward, a flowery path carries the vision down to the gleaming waters of the river, thence over the fertile island to the towering mountains beyond, whose tops seem to touch the very clouds.

The pioneer Frenchman, vigorously and bravely erecting his home in the wilderness, had never heard of the peaceful settlement of Quakers away down the stream, and both parties seem to have been equally astonished when the envoys of the Penn government, after toilsomely leading their horses through the unknown terrors of the cavernous Gap, entered the fertile country beyond, and found a firmly-established settlement. The Huguenot told them of his crops, and how he carried his wheat along a good road to 'Sopus, and proudly showed his little fort and his cultivated islands, while the envoys especially marvelled at his fine apple-trees, and told him how a town was being planted down the river.

The love of adventure that marks the true frontiersman is well illustrated in the

story of the La Barres. Three brothers, who had also fled from France to find religious liberty in a new country, landed first at Philadelphia, and, anxious to found a home in the wilderness, pursued their course up the Delaware. Believing that the remotest frontier was at the Forks, where Easton now stands, they wandered on still farther, until, assured that they had safely passed the very utmost verge of civilization, they built themselves a cabin on a hill-side near the Delaware, a little below the Gap. Expert marksmen, they supplied themselves with game, while, with the adaptability of their nation, they were speedily in friendly relations with the Indians, who willingly supplied them with corn. Congratulating themselves on having reached the longed-for *ultima Thule* of savage solitude, they lived for some months in blissful ignorance of the fact that Depuy was already firmly established on the other side of the mountain; and there is something ludicrous in the description of their first annoyance and disgust at the discovery of a neighbor. They, however, submitted heroically to the misfortune, and allowed themselves white bread on Sundays, as a compensation for living so near Depuy's mill that it took only one entire day to toil with a bag of wheat over the mountain-road, wait till it was ground, and then return.

The stalwart brothers married Dutch wives, and founded families near the Gap, where they remained until the country, in 1808, became too crowded for one of the descendants, who in that year, at the age of eighty-five, emigrated to Ohio to find more room. On that new frontier, when he was ninety-eight, his first wife died, and the widower, at the ripe age of one hundred, was married again, and lived to reach one hundred and five. A son remained at the Gap, where he was living a couple of years ago, at the age of one hundred and seven, and was still frequently employed in the forests in cutting wood. His brother, aged ninety-eight, and two sisters, above eighty-six, were all strong and hearty; and, as an instance of a prosperous early marriage, it may be mentioned that his son, who at twenty-one had chosen a bride of thirteen, was still hale and hearty at seventy-nine, his wife being only seventy-one.

The curious conglomeration of American society is well exemplified by the history of the Gap; for another leading family was founded by Daniel Brodhead, a Yorkshireman, captain of grenadiers to Charles II., who assisted in the capture of the New Netherlands from the Dutch. His son Daniel, colloquially Dan, invited the Moravians to found a mission at his settlement, which he plainly called Dansbury, a name which it retained until it was rechristened into Stroudsburg, in honor of Colonel Stroud, another ancient resident.

The two grand mountains which form the mighty chasm of the Gap have been fittingly named. The one on the Pennsylvania side is Minsi, in memory of the Indians, who made the Minisink their hunting-ground. The opposing more rugged and rocky cliff in New Jersey bears the name of Tammany, the chief of chiefs, who clasped hands in solemn covenant with William Penn under the elm-tree of Shackamaxon.

The ruggedness of the narrow defile is seen in the sketch of the entrance. The bold face of Tammany exhibits vast, frowning masses of naked rock, while the densely-wooded Minsi displays a thicket of evergreen, with the railway-track skirting it down by the water's edge. Mount Tammany defies ascent except by a vigorous climber, but the bold and distinct stratification shown in the great rocky mass called the Indian Ladder adds to the grand abruptness of the outlines, and from the narrow mountain-top is best beheld the wide, extended view of the magnificent scenery above the Gap.

Mount Minsi owes its sweeter beauty to the lovely streams of water that descend

Distant View of the Gap.

its sides beneath a dense foliage, which veils the mossy pools and fern-draped cascades from the sunlight into the cool twilight that enraptures the summer tourist.

Successive ledges, or geological steps, mark the face of Minsi, and upon the lowest of these, at nearly two hundred feet above the river, stands the old and well-known hotel—

> "Kittatinny House, that on a rock is founded,
> So, when floods come, the folks won't be drownded."

The stream that issues beneath the hotel, to fall in a cascade into the river, has come down the mountain-side through a dark ravine. The densest bordering of rhododendrons fringes its sides with dark foliage and lovely blossoms, while tall trees complete

the shade. Far up the ascent it takes its rise in the Hunter's Spring, whose cool margin has long been known as a welcome resting-place to the sportsmen that sought deer along the range. Under the name of Caldeno Creek, it continues its downward course by cascade and water-fall, and, to those who have once followed its devious way through the shaded ravine, the lovely glens and fairy grottos must return in dreams, for to dream-land does their witching, twilight beauty seem to belong.

Along the face of Minsi, about five hundred feet above the river, runs a grand horizontal plateau of red shale. Extending for several miles along the mountain, it

Cherry Valley.

makes one of its most remarkable features, and is known as the Table Rock. Over the slope of this ledge, at an angle of forty-five degrees, the lovely Caldeno flows in a charming succession of miniature falls or rapids. The rocky strata beneath are densely covered with moss, which, kept ever verdant by the passing streamlet, is still further fostered in its growth by the thick shade of towering trees, and gives the spot its claim to the name of Moss Cataract.

Lower down, Caldeno, stilling its wavelets into temporary repose, rests a while in the cool confines of a rocky basin. Shade even more dense makes a twilight at midday, and, dark, silent, and secure, a happy fancy has made it Diana's Bath.

At a still lower range, or ledge, the stream dashes at Caldeno Falls over a rugged,

rocky precipice, in which the singular regularity of the formation is exposed in the broken surface of the falling water.

One of the loveliest aspects of the varied beauties of the Gap is under the early morning light, when—

"The mountain-mists uprolling let the waiting sunlight down—"

dense clouds of vapor break the contours of the peaks, causing uncertainty of vision, increasing or diminishing the apparent height, at times making the tops suddenly appear to bend forward as if threatening to fall, or as suddenly recede into vast distance, while softly-tinted masses of veiling vapor are wafted hither and thither by the wind at its own sweet will to catch the morning splendors, and wreathe in many-colored scarfs around rock, and crag, and lofty pine.

Poetry and romance have familiarized us with the legend that, as a forerunner of storm, Pontius Pilate still appears above the mountain that bears his name, and, bending in cloudy presence, wrings his hands in remorse for his evil deed. A cloud-phenomenon somewhat similar occurs upon these heights. A narrow space between two jutting peaks foretells by clearness or cloud the fortunes of the morrow, but no legend lingers around the summits, and prosaic Americans call it the Rain-Hole.

The mysterious ravines and wooded fastnesses of Minsi ever stimulate a thirst for exploration, and many years ago some visitors in pleasant frolic organized the Honorable Company of Sappers and Miners. With a merry assumption of business, officers were appointed and rules prescribed; half in work and half in play, the company from year to year continued its explorations, opening new paths, bridging streamlets, strengthening frail foot-ways, and gaining from their exertions all the pleasurable enjoyments of a mimic frontier-life, with the additional zest of knowing that, notwithstanding all their civilizing efforts, it was still possible to be lost upon Mount Minsi. The annual festival of the Sappers and Miners was always commemorated by the ascent of Minsi to unfurl the national banner from the highest tree-top, and, as the flag caught the mountain-breeze, an answering shout rose from valley and hill-side from the less valorous or less light-footed beholders.

But, wild and wonderful as is the interior of the Gap, it is outside its limits that the grand scenery of the region must be sought. From the mountain-peaks on every hand open magnificent vistas, and from the river, both below and above the chasm, the views are of marvellous extent. Spurs jutting out from the main range give endless variety to the landscape, while hollows, gaps, and ravines, add their countless beauties.

Several miles above the Gap, the Delaware is joined by the mountain-stream called the Bushkill. This creek was long regarded as the extreme limit of civilization in this direction, all beyond being a howling wilderness too often full of howling savages. In this neighborhood were the copper-mines which at an early date attracted the Dutch settlers

from the Hudson, and induced them to open the famous Mine Road, which became the thoroughfare from Albany to Philadelphia, following the Esopus and Neversink Creeks to the Delaware, crossing that river to reach the western side of the Blue Ridge, and passing near the Gap of the Delaware to find a passage at the Lehigh Gap, and thence a southerly course to Philadelphia.

Delaware Water-Gap, from the South.

Upon the Bushkill is one of the most beautiful water-falls of the district. A chasm one hundred feet in height is surrounded upon three sides by an almost perpendicular wall of rock, over which the water falls. From a point below, the scene is grand in its sombre magnificence, as the swift torrent, striking midway upon a projecting ledge in the rock, rebounds in snowy foam-flakes, which, after the momentary interruption, continue to

fall into the dark chamber of rock below. On the walls of the chasm, at a level with the summit of the water-fall, there is still another scene of equal beauty, as the rapid stream emerges from the dark shades of the forest to make the sudden plunge from the precipice.

Another small mountain-torrent near by frets its way through a tortuous channel of dark fossiliferous limestone, until, in a sheet of foam, it leaps over a precipice in a shower of dazzling whiteness, which some unpoetic beholder compared to—buttermilk. Submissively has the uncouth misnomer been accepted, and the singularly beautiful cascade still bears the name of Buttermilk Falls. Upon the same stream the Marshall Falls deserve special note for their picturesqueness. The dark surrounding rock is crowded with fossil impressions, which fill the stone with irregular fissures; through this ledge the waters have torn and gnawed their way down a chasm fifty feet in depth, leaving a veil of overhanging rock in front, through which the spectator gazes at the gloomy cataract as through a curtained casement.

That the Minisink was a favorite abode of the red-men is proved at almost every step. The plough turns up innumerable quantities of spear-heads and arrow-points, as well as hammers, axes, and tomahawks of stone, and rude cutting instruments fashioned out of flint; stone mortars and pestles have also been found, with bowls and jars of earthenware.

Upon commanding elevations, where small plateaus permit at once a kind of seclusion as well as an extensive outlook over the mountains and the river, there are many Indian burial-grounds, always chosen for the beauty of the position. In the graves almost invariably are found articles of personal adornment, with warlike weapons, and frequently vessels of clay. Glass beads, bells, and trinkets of metal, are supposed to prove some intercourse with the white race, but beads of bone, bowls of baked earthenware composed of pounded shell and clay, and the ruder instruments made out of stone, mark Indian workmanship, and may belong to more remote generations.

As one of the wonders of the Gap, must be counted the marvellous lake upon Tammany—a lake so singular that popular superstition has been tempted to add a final touch to its surpassing strangeness, and declare that it has no bottom. As if in quaint climax to her wild work, Nature, after riving the mountain to its very base, here places beside the rude chasm, on the very apex of the lofty peak, a peaceful lake. Masses of bare gray sandstone stand about its margin, and within the stern encirclement the pure water reflects alone the swift-darting birds or the slowly-moving clouds, for naught else comes between it and the sky. In this unbroken solitude, beside the lonely lake, is a single Indian grave in a narrow cleft of rock. On a lower level, near at hand, many graves were gathered into one place of sepulture, as if to make the loneliness of this solitary tomb even more marvellous; and fanciful conjecture can but gather round the grave to ascribe to its tenant some strange history, and imagine him to be a king who

DELAWARE WATER-GAP, LOOKING SOUTH FROM SHAWNEE.

disdained companionship in death with those he had ruled when living; or a poet who sought a resting-place beneath the clouds, or a prophet entombed by his devout followers beneath the skies in which he had beheld visions.

Throughout the whole Minisink single bodies are occasionally exhumed by the plough, or washed out from the river-banks, but it has been conjectured that these have been enemies, or those whose fate was unknown or not regarded, for the numerous burial-grounds attest that even the wild wanderer of the forest craved to find his last resting-place in companionship with his kind. In these ancient cities of the dead each tenement is a low mound surrounded by a clearly-marked trench, and frequently several mounds are connected into a single group by a ditch encircling the whole, as if to exhibit some bond of clan or kindred. In the graves that have been examined in the plateaus consisting of coarse gravel and clay, the bodies are found embedded in the river-sand, which must necessarily have been carried a considerable distance expressly for the purpose.

Little but their graves remains of the original people that once congregated into the valleys of the Minisink, and hunted upon its hills, and little legendary lore has been preserved. The peaceful relations between the earlier colonists and the Indians were interrupted, and a long, bitter, and bloody war for the possession of the land soon swept away every friendly recollection, and the settlers learned to blot out the very memory of their antagonists, and erase every trace of that occupation which had been so fiercely contested.

The last lingerer of the primitive people was Tatamy, veritably the last of the Mohicans. He had long served as interpreter to the travelling Moravian ministers, and his sympathies bound him so closely to the region of the Minisink that he voluntarily remained behind when his tribe moved to the West. An iconoclastic generation has degraded the name of his lonely home into the wretched diminutive of Tat's Gap. In this wild spot he remained, and a touching picture is drawn of the solitary man sitting alone at the door of his wigwam, hunting alone upon the mountain, singing in the forest wilds the songs of his departed nation, and striving feebly to preserve the habits of his old life amid the encroachments of civilization. At the commencement of the Revolutionary War bands of hostile Indians frequently made inroads into the frontier settlements, and poor Tatamy became a special object of their hatred. Fears for his safety were felt by the white friends to whom he had adhered with such singular faithfulness, and he was induced to abandon his dangerous solitude. Land was provided for him in a safer region near Depuy's, and there he continued until his death.

The story of the relations between the aboriginal races of America and their European conquerors has always been a sad one, and it is especially so in the land of the Minisink. Here a singularly mild and cultivated tribe, the Lenni-Lenape, welcomed the early settlers with unusual kindness, a feeling which seems to have been quite heartily

reciprocated by the French and Dutch. This friendly intercourse was preserved unbroken for a long period, and promised to remain so, when it was utterly destroyed by the incidents of the disastrous "Walk" of the year 1737.

The Indians had apparently been perfectly satisfied with the terms of the purchases made by William Penn. According to the native custom, the territory sold was always measured by distances to be walked within specified times. In the first walk, William Penn had taken part in person, and the affair had been conducted in true Indian fashion, the walkers loitering, resting, or smoking, by the way. But the successors of Penn had determined upon a different policy, and prepared a scheme for driving a sharp bargain.

The boundaries of the territory were to be determined by the point reached by walking for a day and a half from a certain chestnut-tree at Wrightstown Meeting-house, and the proprietors were undoubtedly determined to make, what in modern phrase is termed, a "good thing of it."

Of the incidents of the famous "Walk" many accounts have been given, differing slightly in details, but agreeing in the important facts. Offers were published in the public papers, promising five hundred acres of land anywhere within the territory to be measured, with five pounds in money, to the person who would walk the farthest in the specified time.

By the terms of the agreement, the governor was to select three persons for the task, and the Indians to furnish a like number from their own nation. The men engaged, as particularly fitted for the purpose on the part of the province, were Edward Marshall, James Yates, and Solomon Jennings.

Also, according to Indian usage, the measurement was to be decided when the days and nights were equal, marking precisely twelve hours between sunrise and sunset. Therefore, attended by a large number of curious spectators, belonging to both of the interested parties, the six walkers met before sunrise on the 20th of September.

They stood together, each resting one hand upon the tree awaiting the signal, and then, just as the sun appeared upon the horizon, started upon the unfortunate trial of speed.

By established custom, a day's walk was, with the Indians, a well-ascertained distance, and the day and a half from Wrightstown was expected by them to end at the Blue Ridge, the savages never intending, or even supposing, that the boundaries of the purchase could by any possibility intrude into, much less include, their favorite hunting-grounds of the Minisink.

The previous arrangements had, however, been made with care; the direction of the route had been distinctly marked, and a line run to the greatest advantage of the purchasers. That no time should be lost, relays of horsemen attended the walkers with liquors, and refreshments awaited them at suitable places along the route.

Marshall fulfilled his part of the contract, walking with great rapidity and without

Moss Cataract.

pause. This infringement, at least of the spirit of the bargain, provoked incessant complaints and protests from all the Indians, not only those who belonged to the party, but those who were assembled as spectators, the savages exclaiming again and again, in angry expostulation: "No sit down to smoke—no shoot squirrel; but *lun, lun, lun*, all day!"

Before the first day ended, one of the white men and two of the Indians had given out; and when, before sunset, Marshall and Yates reached the Blue Ridge, they met there assembled a great number of the savages gathered to witness the expected ratification of the boundary. When it was discovered that not even the first day's walk was yet accomplished, the manifestation of anger became general; the Indians loudly proclaiming the whole affair a cheat, by which all the good land would be taken from them, indignantly refusing their assent to the purchase, and even proposing that, if necessary, every Indian would come in the spring-time with a buckskin in his hand and buy the land back again.

Diana's Bath.

By sunset Marshall and Yates had passed the mountains, and started afresh at sunrise the next day; but Yates soon turned faint and fell from exhaustion, while Marshall pursued his course, and at noon reached the Pocono Mountain, having walked about eighty-six miles, according to the estimation made at the time.

The indignant Indians immediately inaugurated a systematic retaliation, and the purchasers, who began to move upon the land in considerable numbers, found the savages arrayed in armed hostility.

Moss Grotto.

The warfare in this case did not consist of the usual occasional skirmishing and depredations from small bands of drunken savages accidentally aroused to open enmity, but was much more formidable, as being a part of a determined attempt of the Indians to regain the lost territory, which they believed had been taken by fraud, and which they never relinquished until the year 1764.

The condition of the district may be inferred from the fact that, in 1740, the settlers near the Gap demanded armed assistance from the provincial government, and again in 1763 presented a petition, signed by the prominent residents, praying for help, as "we lie entirely open to the mercy of those barbarous, savage Indians." The effect of the continuous conflict upon the agriculture of the region may be gathered from the order given in 1740, by Nicholas Depuy, upon the treasurer of Bucks County, for the payment of the bounty upon sixteen wolves, all killed by the same man.

The struggle was at the fiercest from 1752 to 1759, the war-front being considered as extending from Bethlehem to Bushkill, and the danger being so imminent that in many cases the farmers abandoned their homes and their unharvested crops, to be burnt by the Indians; while those residing below the Blue Ridge demanded with importunity that the mountains should be made the frontier, and all the region beyond abandoned without any attempt either at defence or occupation.

Depuy's house, which had always been regarded as a stronghold, seems to have been strengthened into a sort of fortress, surrounded by a stockade, with a swivel-gun mounted at each corner. When times of special danger required a call for government assistance, Depuy furnished the supplies for the men sent to him; and in an officer's report, in 1758, the garrison is described as consisting of twenty-two men, with eight months' provisions.

In the year 1756 the condition of affairs had become so terrible that a large number of farmers were thoroughly panic-stricken, and threatened to abandon the district entirely to the Indians. In this emergency, Benjamin Franklin was sent by Governor Morgan to Bethlehem, and succeeded in forming a line of defence from the Lehigh to Bushkill. At his instance, Governor Morgan soon afterward visited the distressed district in person, and established a line of block-houses from Shamokin, on the Susquehanna, to the ever-uttermost Bushkill.

These primitive fortifications consisted merely of a wall of defence, made of stakes driven into the ground and banked up with earth; while within the enclosure a log-hut was usually erected in each corner, to serve as barracks, and also as shelter for neighboring families, when driven to seek protection from the savage enemy.

The condition of society produced by these years of warfare was, of course, peculiar. While many of the men, who daily lived in fear of attack, were educated into all the virtue, strength, and independence, that spring from such experience, others became, under the same influences, mere outlaws; and it is not extraordinary that, when a bounty upon scalps was raised, there were men who sought the scalps of the savages in precisely the same spirit that they had sought those of the wolves, and who, with the trained eye of the sportsman, detected the thread of smoke rising from the wigwam by day, or the firelight by night, in order to crush the inmates as if they were but obnoxious reptiles.

The Indian hero of this war was the celebrated Delaware chieftain, variously called Tadeuskund or Teedyuscung. He had long been favorably known among the whites as Honest John, and had even been baptized by the Moravians as Gideon; but his apologists were fain to urge that a certain Christian "walk" and conversation was enough to make him forget his baptism, and render him a ready listener to the French, or any other enemies of the settlements.

It was this chief who, in 1756, at Easton, as the representative of four Indian nations, boldly declared, as he stamped his foot upon the earth: "My people have not far to go for the reasons for war. The very ground upon which I stamp was my land and my inheritance, and has been taken from me by fraud—yes, for it is fraud when one man buys lands of us, and takes a deed of it, and dies—and then his children make a false deed like the true one, and put our Indian names to it, and take from us what we never sold. This is fraud! It is fraud, too, when one king has land beyond the river, and another king has land on this side, both bounded by rivers, mountains, and springs, that cannot be moved, and those greedy for lands buy of one king what belongs to the other. This, too, is fraud!"

Teedyuscung, at another time, announcing himself as the king of ten nations, presented to Governor Morris four strings of wampum, each delivered with a separate speech: "One, to brush the thorns from the Governor's Legs; another, to Rub the Dust

Caldeno Falls.

out of the Governor's Eyes, to help him to see clearly; another, to Open the Governor's Ears, that he might listen Patiently; and the fourth, to clear the Governor's Throat, that he might speak plainly."

The Delaware Water-Gap itself was long a forbidding chasm, dreaded and avoided by travellers, unless chance or necessity compelled them to thread the defile by the Indian trail, which found a devious and dangerous way among huge rocks piled up in Nature's masonry; but the pass at last found an admiring explorer.

Antoine Dutot, a wealthy planter of Santo Domingo, had been compelled to flee for his life during the insurrection in that island. He escaped to Philadelphia, where he renewed his old acquaintance with Stephen Girard, and by his advice visited the upper portion of the Delaware River. The beauty of the scenery of the Gap excited him to the utmost enthusiasm, and he became the eager purchaser of lands hitherto despised as barren and valueless, upon part of which the Kittatinny House now stands. He firmly believed that the Gap was destined to become the seat of a great city, as a principal depot of the immense future commerce of the river. To meet this coming want, he built a village, called Dutotsville, from which even his name has now departed, and which contains, as the only vestige of his hope-inspired labors, the market-square devoted by him to public use. The wagon-road through the Gap, which was constructed in the year 1800, passed by his property, and he soon after obtained a charter for a toll-road upon the track now occupied

Bushkill Falls.

by the railway. This road was never remunerative, and the toll-gate was a mere vexation, where he would stand with courteous smile and polite bow, saying, in very broken speech, "Von leetle toll," which the mischievous youth of the neighborhood delighted in pretending to understand as a mere polite salutation, to which they responded with a deep bow and polite "Good-day," as they continued on their way.

Despite all misfortunes, the hopeful Frenchman maintained his faith in the future of the home of his adoption. A gentleman of education and refinement, animated, romantic, and polite, he, in his gay old age, seemed oddly at variance with his rugged surroundings, as, in broadcloth, silk stockings, ruffles, and silver knee-buckles, he preserved the courteous deportment of the days when he presided over his wealthy West-Indian plantation. Some years before his death, he purchased a cannon and a great bell, which were ordered in his will to be used to mark the fulfilment of his long-reiterated prophecies. The bell, hung in a belfry upon his house, was to ring a triumphant peal, and the cannon, from his prescribed grave upon Sunset Hill, was to answer in response of glorification at the moment that the first steamboat should touch the landing, or the first locomotive pass through the Gap. But the Frenchman had been lying in his solitary grave for fifteen years before the locomotive steamed through the chasm beneath him, his cannon had exploded long before in commemorating a Fourth of July, and his bell had been put to service over a school-house in Stroudsburg, where it summoned the youth who were to reap the benefits of the future that had beamed so brightly upon his imagination.

MAUCH CHUNK.

MAUCH CHUNK, doubtless the most truly picturesque town in the Union, is situated in the very heart of the Pennsylvania coal-region. Its name, in the original Indian language from which it is derived, means "Bear Mountain." It lies in a narrow gorge between and among high hills, its foot, as it were, resting on the picturesque little Lehigh River, and its body stretching up the clefts of the mountains. It is so compacted among the hills that its houses impinge upon its one narrow street, and stand backed up against the rising ground, with no space for gardens except what the owners can manage to snatch from the hill-side above their heads. As proof of what can be done in a narrow space, this

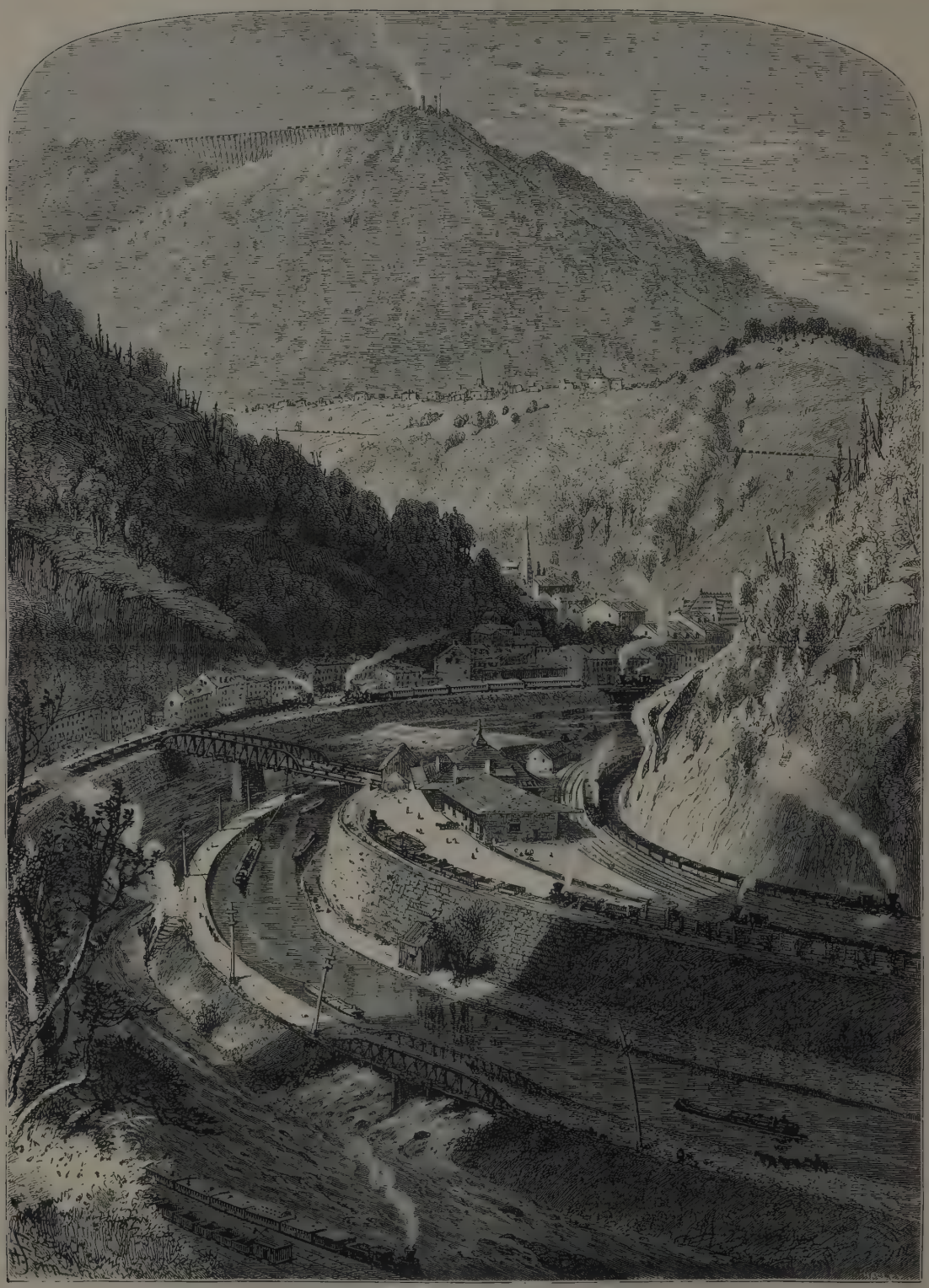
quaint and really Swiss-like village affords a capital example. In one portion, just where the turbulent Lehigh sweeps around, as if to give the town a salute, and then rushes merrily off again, one sees the river, a canal, two railways, a road, and a street, packed in a space scarcely more than a stone's-throw wide—all of which the reader can note, without stirring from his easy-chair, by a glance at Mr. Fenn's larger drawings.

There is a great deal in knowing how to find the picturesque, and Mr. Fenn, in his large drawings, has selected points of view that present the hills and the town in their best aspect. The first of these views is taken from the road that runs along the side of the high hill just below the town. In the second illustration, one can discern the road, faintly marked, ascending obliquely the distant hill. From this road the picture gives just a glimpse of the receding town to the left; shows in the distance Mount Pisgah, which is not a volcano, notwithstanding the smoke that seems to issue from its apex; and gathers at the feet of the spectator hurrying river, busy canal, railways, and highway, as they lie crowded between the steep hills. Here there is always the stir of a great traffic. Ceaselessly day and night the long, black coal-trains come winding round the base of the hills, like so many huge anacondas, often with both head and tail lost to the eye, the locomotive reaching out of sight before the last car comes swinging round the curve. These trains are of marvellous length, sometimes, when returning empty, numbering over two hundred cars. So continuous is their coming and going, sweeping now around the foot of the hill opposite, and now around the base of the hill on which we stand, that usually several trains are visible at the same time; and rarely at any moment is the whistle or the puff of the locomotive silent. The writer's curiosity prompted him to keep a record of passing trains for an hour, and he found they averaged one in every two minutes. These trains are almost exclusively employed in freighting coal; and this immense traffic in black diamonds becomes still more surprising when it is remembered that, in addition to the trains, canal-boats similarly freighted ceaselessly pass the town with the regularity, order, and succession of a procession. It is a relief to have recourse to figures, and to learn that one of the railways alone carries eighteen thousand tons of coal weekly. Treble this, and the aggregate sent from or passing this place is probably approximated. Up here on the hill-side the scene before us is certainly novel and picturesque. We may watch the stirring traffic, the quiet canal, the swift Lehigh—sometimes only the small thread of a river barely covering its rocky bed, but occasionally a roaring flood bringing ruins upon its surface and carrying ruin before it—or we may study the tints and forms of the receding hills, or note a singular locomotion far up on the sides of the distant Mount Pisgah.

On the highest part of this mountain are two tall chimneys, ascending to which is the line of a railway. The chimneys and the building thereto give note of a stationary engine at this crowning apex of the height, and the line up the mountain-side shows us where the famous Mount-Pisgah inclined plane ascends to its top. The line crossing

the hill half-way down, and just below Upper Mauch Chunk, marks the course of the Gravity Railway, one of the marvels of the place. If the reader pleases, we will descend our mountain-highway, picturesque and beautiful every step of it, with beetling cliffs above and precipitous reaches below, and prepare for an odd sort of journey to the top of Mount Pisgah, and, by the Gravity Road, to the coal-mines beyond. But, before we proceed, let us understand where we are going and what we shall see a little better by consulting a brief page of history and a few facts of description.

The mines which supply the principal traffic of Mauch Chunk are situated nine miles back from the river, on Sharp and Black Mountains, and in Panther-Creek Valley, lying between. The first anthracite coal was discovered on Sharp Mountain, sometimes known as Summit Hill, by a hunter named Ginter, in 1791. The hard anthracite, however, was at first called "black-stone," and its combustible quality denied. Experiments with it were made in Philadelphia, and it was gravely asserted that this hard, rocky substance, which resembled coal, only *served to put the fire out!* Experiments, however, at a later date, must have satisfied those concerned that anthracite coal, if slower to ignite than bituminous, yet possesses decided combustible qualities, for companies were formed to work the mines on Sharp Mountain. It was not, however, until 1820 that shipments became at all regular or noteworthy. Coal was brought from the mines, slowly and wearisomely, by wagons, until 1827, when a track was constructed, with a falling grade, from Summit Hill to the Lehigh, by which cars were run down by their own gravity—hence the name Gravity Road. The cars were drawn back by mules, which, of course, had to be sent down on cars with each train. This method continued for a long time; but the traffic at last so increased that a more expeditious return of the cars to the mines was needed, and in 1844 the plan of a back-track was arranged. An inclined plane was laid to the top of Mount Pisgah, up which the empty cars were elevated by means of a stationary engine; the track, then, by a downward grade, the cars moving by force of their own weight, reached the foot of Mount Jefferson, up which they ascended by another plane—the power a stationary engine—and then, by another downward grade, reached summit Hill. From Summit Hill the cars descended to the mines in the valley, by what was called the Switch-back, a term now often given to the entire road, but which at present has no correct application to any part of it. The Switch-back was a means of descending the side of the mountain by lines such as we familiarly call zigzag. The car ran swiftly along the side of the hill on a falling grade until reaching the terminus of the track, where its momentum carried it up an artificial hillock until its speed was arrested. Here it was switched upon another track, and it rushed back again along the side of the hill upon a falling grade until, reaching another terminus, it was once more switched back upon a third track, and so on by a series of inclined planes the valley was reached. Great speed was attained on the Switch-back, the rate often reaching sixty miles an hour, and a pleasure-car was



MAUCH CHUNK AND MOUNT PISGAH

MAUCH CHUNK, FROM FOOT OF MOUNT PISGAH.

attached at certain hours for visitors. This is all changed now, the cars reaching the valley by a longer but circuitous route. The cars are returned to Summit Hill by means of inclined planes and stationary engines; and from the Summit to the Lehigh, a distance of nine miles, the gravity-impelled cars dash at a rapid rate with their spoils from the heart of the mountain.

In the first of our larger illustrations, the Mount-Pisgah inclined plane and a portion of the Gravity Road, as already mentioned, may be seen. The cars which we observe on the grade may be discovered at their terminus in the engraving given below. Here they rattle down into huge coal-boxes, into which their contents are dumped

Canal-boats receiving Coal.

and shot into the waiting canal-boats, which are always gathered here by hundreds in picturesque confusion.

After this brief glance at the origin and use of this singular road, we may undertake with greater satisfaction a jaunt over its long circuit of twenty-five miles.

An omnibus, at stated hours, conveys the curious passengers from the Mansion House to the foot of the inclined plane. It rattles through the town's single street, diverges into the road that ascends the hill, and, after a journey that the impatient traveller imagines must have already gotten him to the top, draws up at the foot of the famous plane, which, if our description has not adequately depicted to the mind's-eye of the reader, the initial illustration will bring before him accurately and clearly. It

may be mentioned here that the length of this plane is twenty-three hundred and twenty-two feet, and its elevation six hundred and sixty-four feet. At its foot we find a very small passenger-car—a diminutive, undergrown little vehicle, designed to hold ten passengers—in which we may enter. The plane appears, when standing at its foot, to reach almost perpendicularly up into the air; and when at last the ascent begins, one feels as if he were drawn up into the clouds, and naturally commences to speculate with what terrible swiftness the car would shoot down the plane if it should get loose. The little hand-book for travellers, however, which every inquiring and right-minded passenger is sure to possess, gives assurance that this is impossible. Behind the miniature carriage is what is called a safety-car. From this car extends an arm over a ratchet-rail, laid between the tracks. Should an accident occur either to the car or to the gearing, this arm, the moment a downward movement begins, inevitably falls into the notch of the ratchet-rail, and, being too strong to break, the train is at once brought to a stand-still. It is frightful-looking, notwithstanding this assurance and one discovers that his imagination takes a strange pleasure in depicting the terrible whirl through space and the horrible splintering upon the rocks, should it please Fate to give the pleasure-trip a tragical turn. As the car ascends, the view enlarges; and, when the height is reached, a splendid prospect opens to the delighted visitor.

A Mauch-Chunk Highway.

What follows may now easily be conceived, by means of the description of the road already given. The car runs easily and swiftly along, without other force than its

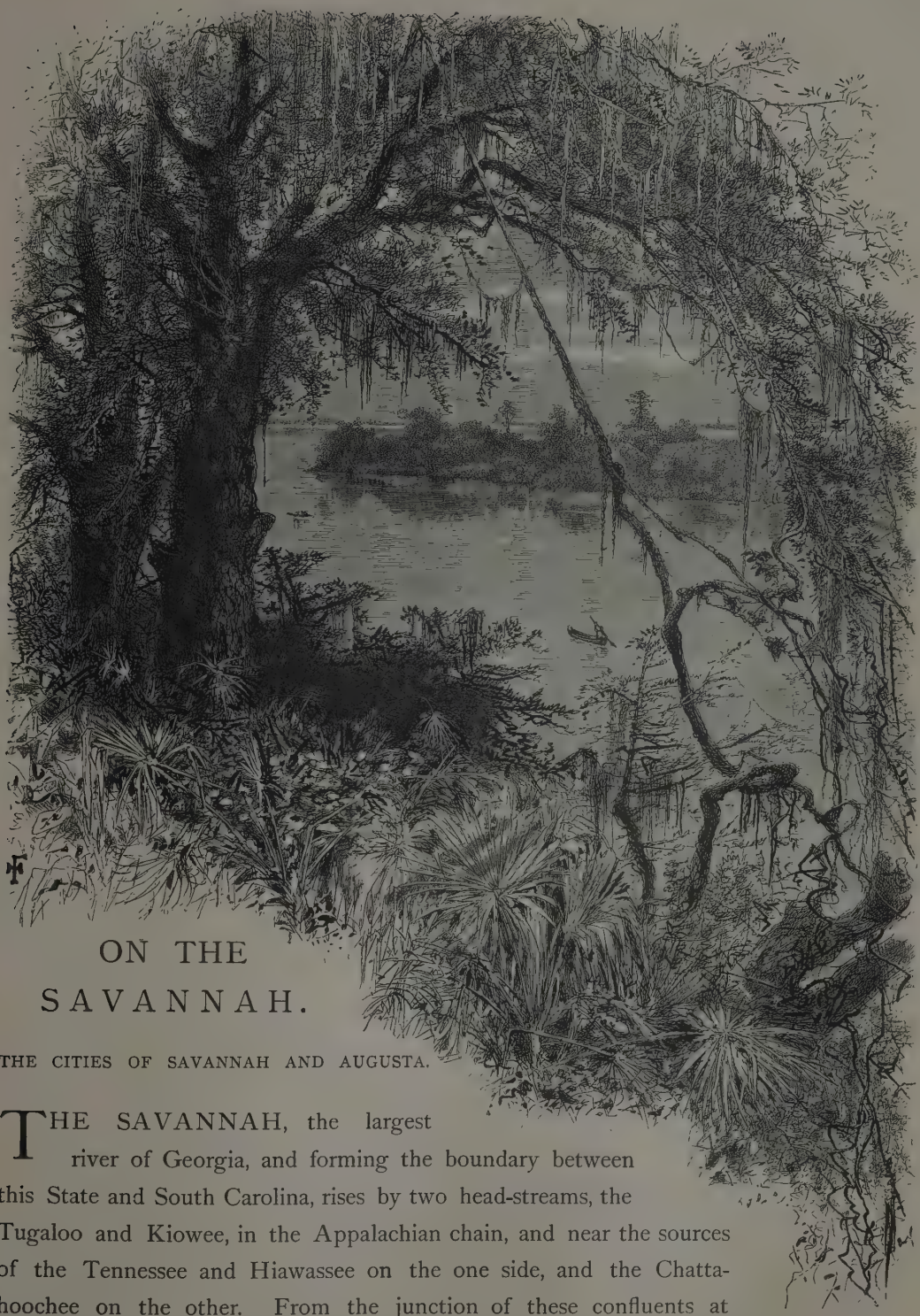
own weight, the road being through beautiful woodland-scenery. As we draw near the mines, large villages appear, occupied principally by the miners, and at Summit Hill is a hotel, church, and other evidences of civilization. The huge structures, called coal-breakers, at the mouths of the mines, form new, striking, and picturesque objects, and immense piles of *débris*, accumulated in excavating for the black wealth below, look like small mountains. Near abandoned mines, these vast heaps give indications of a new soil gathering on their surface. Bushes and small evergreen trees have already managed to find sufficient nurture amid the slate and coal-dust for their roots. The leaves from these growths will add soil to the surface, and in time there can be no doubt that, what are now unsightly masses of *débris*, will be covered with grass and trees, affording possibly a new puzzle for the geologist of a thousand years hence.

The circuit completed, we leave the car well up Mount Pisgah, and descend the mountain-road to the village. The roofs show far down below us among the trees, and the houses, hugged in close by the hills, are grouped in most picturesque form. It is the most novel and striking approach to a town that can be imagined. As we near the houses they seem so directly beneath that we wonder if a slip would not precipitate us down a chimney, or impale us on a steeple. The second of our larger illustrations shows the scene as we near the town from this approach. There is a church-roof below the point of view, and a row of houses in the middle ground on the hill-side, and a new, picturesque church, set up by the architect just where it would add most to the beauty and effectiveness of the picture.

A tunnel is now constructing through the mountain, which will bring the mines in direct communication with canal and river, without plane or grades. This will simplify the business of the mines, no doubt, but the Mount-Pisgah plane and the Gravity Road have always been among the most novel and interesting features of the place, and their loss will be deplored by tourists.

The street-scenes in Mauch Chunk are quaint enough. They are literally highways. As there is no room for gardens or out-buildings back of the houses, they are built up above them, and are reached by ladders. It is not uncommon, in the ruder parts of the town, to see a pigsty, up above the house-top, reached by a ladder; another ladder extending above this to a potato or cabbage patch, and another leading to the family oven, presiding over the strange group with suitable honor and dignity.

A visit to Mauch Chunk makes a pleasant summer-trip; but in October, when all the superb hills that encircle the quaint town are in the full glow of their autumn tints, the innumerable mountain-excursions that then may be taken, which, in summer, would be too fatiguing, enhance greatly the pleasure of the visit.



ON THE SAVANNAH.

THE CITIES OF SAVANNAH AND AUGUSTA.

THE SAVANNAH, the largest river of Georgia, and forming the boundary between this State and South Carolina, rises by two head-streams, the Tugaloo and Kiowee, in the Appalachian chain, and near the sources of the Tennessee and Hiawassee on the one side, and the Chattahoochee on the other. From the junction of these confluents at

Andersonville the river has a course of four hundred and fifty miles to the sea. Savannah and Augusta, two of the largest cities in the State, are situated upon its banks, the former seventeen miles from where it empties into the Atlantic, the latter at the head of navigation, two hundred and thirty miles from its mouth. The river between these points glides between richly-wooded banks, with occasional glimpses of cotton-plantations in the upper portion and of rice-plantations below. The wild swamp-wastes that mark its lower shores are full of a strange, weird beauty, and the groves of massive live-oaks, hung with their mossy banners, that shadow and conceal the mansions of the planters, have a noble grace that is very captivating.

Mouth of the Savannah River.

The site for the city of Savannah was selected by General Oglethorpe, the founder of the colony of Georgia, who made his first settlement at this point in February, 1733. The city occupies a promontory of land, rising in a bold bluff, about forty feet in height, close to the river, extending along its south bank for about a mile, and backward, widening as it recedes, about six miles. The river making a gentle curve around Hutchinson's Island, the water-front of the city is in the form of an elongated crescent, about two and a half miles in length. The present corporate limits extend back on the elevated plateau, with lowlands on its eastern and western flanks, a distance of about one and a half miles; the area of the municipal limits, at present almost entirely occupied with buildings, being three and one-third miles square. Beyond the city limits, to the south, suburban settlements are fast growing up; and, at the present ratio of expansion, the city proper will soon comprise double its present area, the adjacent grounds being both eligible and available to an unlimited extent.

In its general plan, Savannah is universally conceded to be one of the handsomest of the American cities; and in view of its antiquity, and the fact that its founders were for the most part poor refugees, seeking a home in the wilderness among hostile savages, it is a matter of surprise that they should have adopted a system at once so unique, practical, and tasteful. The streets—running nearly east and west, and north

and south, and crossing at right angles—are of various widths; the very wide streets, which run east and west, being alternated with parallel narrower streets, and each block intersected with lanes twenty-two and a half feet in width. The streets running north and south are of nearly uniform width, every alternate street passing on either side of small public squares, or plazas, varying from one and a half to three acres in extent, which are bounded on the north and south by the narrower streets, and intersected in the centre also by a wide street.

These plazas—twenty-four in number, located at equal distances through the city. handsomely enclosed, laid out in walks, and planted with the evergreen and ornamental trees of the South—are among the distinguishing features of Savannah, and in the spring and summer months, when they are carpeted with grass, and the trees and shrubbery are in full flower and foliage, afford delightful, shady walks and play-grounds for the juveniles, while they are not only ornamental, but conducive to the general health by the free ventilation which they afford. They have well been called the lungs of the city.

Upon the large "trust-lots," four of which front on each of these squares—two on the east and two on the west—many of the public edifices and palatial private residences of Savannah are built. It is a little singular that the Savannaheans are indebted for this beautiful and unique feature of their city to the sagacious precaution of the first settlers against the dreaded attacks of the Indians. We are told by Mr. Francis Moore, who wrote in 1736, that "the use of this is, in case a war should happen, the villages without may have places in town to bring their cattles and families into for refuge, and for that purpose there is a square left in every ward, big enough for the outwards to encamp in."

In addition to these old camping-grounds—many of which were occupied for the same purpose by General Sherman's troops during his occupation of the city—a public park, comprising some ten acres (since increased to thirty acres), called Forsyth Place, was, a few years since, laid out, a considerable distance south of the city limits. It is, however, now being rapidly enclosed by buildings, and will in a short term be the centre of one of the finest and most populous portions of the city. Many of the original pine-trees were left standing on the grounds, which are laid out in serpentine walks, and ornamented with evergreen and flowering trees and shrubbery. In the centre is a handsome fountain, after the model of that in the Place de Concorde in Paris, and which is supplied with water from the city water-works. The lofty pines still standing, with the ornamental trees, afford a grateful shade; while the beautiful shelled walks, the luxuriant grass, the fragrant flowers, and the plashing fountain, make Forsyth Place a delightful retreat from the noise, bustle, dust, and heat of the city.

Among the peculiar features of Savannah which command the admiration of strangers are the wideness of its principal streets, abounding with shade-trees, and the flower-gardens which, in the portions of the city allotted to private residences, are attached to

View of Savannah from the River.

almost every house. Ornamental trees of various species, mostly evergreens, occupy the public squares, and stud the sidewalks in all the principal thoroughfares; while the gardens abound with ornamental shrubbery and flowers of every variety. Conspicuous among the former are the orange-tree, with its fragrant blossoms and golden fruit in their season, the banana, which also bears its fruit, the magnolia, the bay, the cape-myrtle, the stately palmetto, the olive, the *arbor-vitæ*, the flowering oleander, and the pomegranate. Flowers are cultivated in the open air, many choice varieties—queen among them all, the beautiful *camellia Japonica*, which flourishes here in greatest perfection, the shrub growing to a height of twelve to fifteen feet—blooming in mid-winter. At all seasons, Savannah is literally embowered in shrubbery, and in the early spring months, when the annuals resume their foliage, and the evergreens shed their darker winter dress for the delicate green of the new growth, the aspect of the city is truly novel and beautiful, justly entitling it to the appropriate *sobriquet* by which it has long been known, far and wide, of the "Forest City."

The old city of Oglethorpe's time was located on the brow of the bluff, about midway between

Fountain in Forsyth Park.

the present eastern and western suburbs, and its boundaries are still defined by the Bay and East, West, and South Broad Streets. Upon the river-front, a wide esplanade, about two hundred feet in width, extending back from the brink of the bluff, was preserved for public purposes. This is called the Bay, and is now the great commercial mart of Savannah. As commerce grew up, warehouses and shipping-offices were built by the first settlers, under the bluff between it and the river. In time these were replaced by substantial brick and stone structures, rising four and five stories high on the river-front, with one or two stories on the front facing the Bay, connecting with the top of the bluff by wooden platforms, which spanned the narrow road-way beneath, passing between the buildings and the hill-side. Some of these buildings, spared by the great fire of 1820, which consumed the larger portion of the old town, are interesting for their antique and quaint architecture. A range of them, opposite the foot of Bull Street—the

fashionable thoroughfare of the city—is made the subject of a sketch by our artist. These relics of old Savannah, and a few others, hold their place in the line of stately modern buildings, which now extend along the larger portion of the city-front under the bluff. Platforms still connect the upper stories of the stores under the bluff with the Bay; and at the foot of the principal cross-streets walled road-ways lead to the quay, which is wide, and occupied at intervals with large sheds for the protection of goods in the process of shipping and discharging. Along the quay, in close proximity to the wharves, are also located the cotton-presses and rice-mills.

While Savannah makes no special pretensions to architectural beauty, nevertheless the city contains many fine public and private buildings, and the good taste which characterizes her modern improvements evinces a progressive spirit and liberality worthy of

Monument to General Greene.

Church, Bull Street.

her rapidly-increasing wealth and commercial importance. Some of her church edifices are models of architectural beauty; and among the new buildings, many of which have been erected within the past two years, are some substantial and imposing structures. In Monument Square there is a fine marble obelisk, erected to the memory of General Greene, of Revolutionary fame, the corner-stone of which was laid by Lafayette, during his visit to America in 1825. The shaft is fifty-three feet in height. Another and very elegant structure was erected in 1853, to the memory of General Pulaski, who fell, it will be remembered, during an attack upon the city by the British, in the year 1779.

Owing to the crescent form of the city-front, its elevation, and the absence of any eligible point of observation on the opposite side of the river, it is difficult to obtain a view that will convey a correct impression of its size and appearance. This difficulty our artist experienced, as the best position which he could obtain, on Fig Island, pre-

sented but a meagre profile of the city-front and its eastern environs. He has, however, given us a sketch of the city as seen from that point, that will be readily recognized by the citizens of Savannah. The view takes in the line of Hutchinson's Island, on the opposite side of the river, which extends the entire length of the city.

The view of the mouth of the Savannah River conveys a very correct idea of the appearance of the entrance to the harbor, which is capacious and well protected, Tybee Island being the head-land on the left, and the extreme southern point of Dawfuskie Island defining the entrance to the river on the right. The steamer seen nearly opposite Fort Pulaski, which is situated on Cockspur Island, has passed the bar,

Bull Street.

upon which there is a depth of twenty-six feet of water, and, following the wide channel marked by the buoys, is proceeding on her way to the city, which may be reached at full tide, with a depth of eighteen and a half feet of water. When the dredging is completed in what is called "The Wrecks," an obstruction which has existed in the river opposite the eastern end of Fig Island since the old Revolutionary War, a much greater depth of water can be carried up to the city. Passing up the river, the stranger is struck with the peculiar aspect of the wide expanse of grass-clad salt-marsh through which it meanders, forming many islands, but preserving at all times ample width for the navigation of vessels of the largest class.

The population of Savannah, in 1870, was twenty-eight thousand, showing a large increase over the census of 1860; while her exports, during that decade, rose from seventeen million to fifty-eight million—facts affording a striking illustration of her growing importance as a commercial centre. Until the construction of the Central Railroad, thirty

Bonaventure Cemetery.

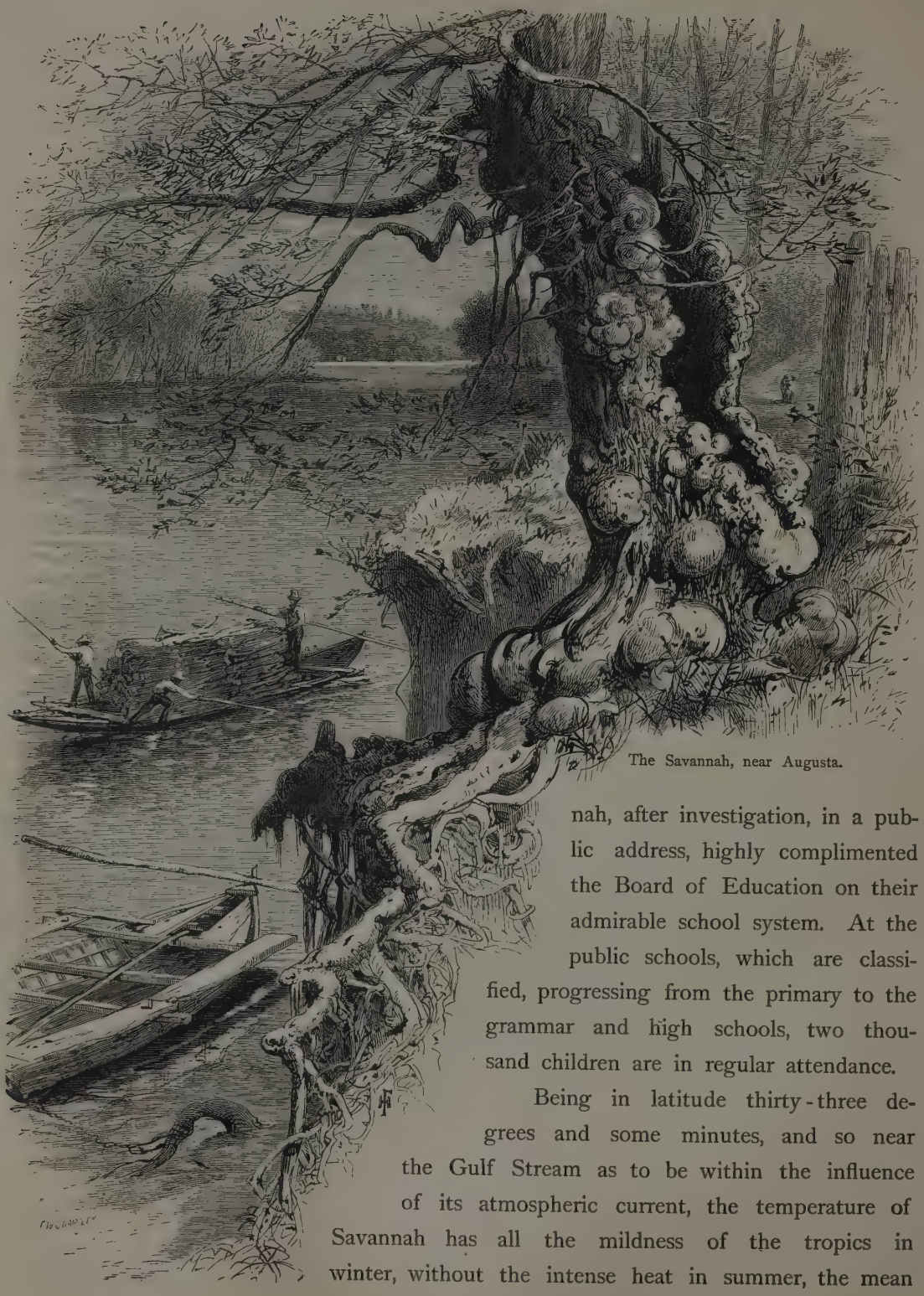
years since, Savannah was comparatively isolated from the internal commercial world, her only communication with the interior of the State being by the Savannah River to Augusta, the head of steamboat-navigation—the wilderness and the great swamps of the Altamaha interposing an impassable barrier to the vast and fertile regions of the Southwest. By her great trunk-roads—the Central, and the Atlantic and Gulf, and their connec-

tions—she now offers an outlet for the products of the entire State of Georgia, Middle and West Florida, and portions of Alabama and Tennessee, and is in unbroken railroad connection with Memphis, Mobile, Vicksburg, Louisville, Cincinnati, and the principal commercial centres of the West. When it is considered that this system of railroad communication, which has already accomplished so much, is constantly radiating and extending; that the harbor is one of the best, safest, and most accessible on the South-Atlantic coast, and that it is almost on an air-line by the shortest route with San Diego on the Pacific, the impulse which must be given to the commerce of Savannah by the completion of the South-Pacific Railroad cannot be over-estimated.

Old Houses in Savannah.

The benevolent, literary, and educational institutions of Savannah are numerous and liberally sustained, some of them being among the oldest in the country; the Union Society, for the support and education of orphan boys, and the Female Asylum, for the care and education of orphan girls, having been founded in 1750. The St. Andrew's Society, St. George's Society, Hibernian Society, Irish Union Society, Hebrew Benevolent Society, Ladies' German Benevolent Society, the Abram's Home for Poor Widows, the Home for Old and Indigent Colored People, the Savannah Poor-House and Hospital, and the Marine Hospital, are all highly-respectable, prosperous, and beneficent institutions. There are also the Georgia Historical Society, the Georgia Medical Society, Young Men's Library Society, and Young Men's Christian Association, besides other fraternal and social associations.

The subject of popular education has commanded the attention of the best and most influential citizens of Savannah, through whose exertions, sustained by the liberal provision of the municipal government, a public-school system has been inaugurated, which is justly pronounced equal to that of any city in the Union. The Rev. Barnas Sears, D. D., agent of the Peabody Fund, while on a recent visit to Savan-



The Savannah, near Augusta.

nah, after investigation, in a public address, highly complimented the Board of Education on their admirable school system. At the public schools, which are classified, progressing from the primary to the grammar and high schools, two thousand children are in regular attendance.

Being in latitude thirty-three degrees and some minutes, and so near the Gulf Stream as to be within the influence of its atmospheric current, the temperature of Savannah has all the mildness of the tropics in winter, without the intense heat in summer, the mean

temperature being sixty-six degrees, very nearly the same as that of Bermuda. The sultriness of the "heated term" in Savannah is less oppressive than in New York or Boston, mitigated as it is by a soft, humid atmosphere, and the never-failing breath of the trade-winds, so grateful at that season. In point of health, the mortuary statistics of Savannah will compare favorably with those of any other city of the same population in the United States, the locality being comparatively free from the fevers of the lower latitudes, and almost entirely exempt from the pulmonary affections so prevalent farther North. For Northern invalids the climate of Savannah, with the conveniences and comforts of the metropolis, is considered preferable to that of the sanitary retreats on the coast farther South.

Savannah is not without suburban attractions, there being several places in its vicinity of historical interest, whose sylvan character and picturesque beauty are in keeping with the "Forest City" itself. Thunderbolt, White Bluff, Isle of Hope, and Vernon, are all rural retreats on "the salts," within short drives of the city, where, in the summer months, the bracing sea-breeze and salt-water bathing are enjoyed. At each of these places, which are reached in a few minutes by an extension of the city railroad, are small settlements and good accommodations for visitors. Bethesda, about ten miles from the city, where the Union Farm School is located, was the site of the Orphan House established by Whitefield in 1740.

Our artist presents a sketch of Bonaventure, which is located on Warsaw River, a branch of the Savannah, about four miles from the city. The scenery of Bonaventure has long been renowned for its Arcadian beauty. A hundred years ago, the seat of a wealthy English gentleman, the grounds around the mansion, of which only a dim outline of its foundations remain, were laid out in wide avenues, and flanked with native live-oaks. These trees, long since fully grown, stand like massive columns on either side, while their far-reaching branches, interlacing overhead like the fretted roof of some vast cathedral, the deep shade of their evergreen foliage shutting out the sky above, and the long, gray moss-drapery depending from the leafy canopy, silent and still, or gently moving in the breeze, give to the scene a weird and strangely-sombre aspect at once picturesque and grandly solemn. Many years ago Bonaventure was devoted to the purpose for which it is so peculiarly fitted by Nature, and became the burial-place of many of the prominent families of Savannah, whose memorial monuments add to its solemn beauty. Recently the place has been purchased by a company, by whom it has been enclosed, the trees trimmed, the grounds cleared of their rank growth, laid out in lots, and opened to the public as a cemetery. In this operation much of the wild beauty of Bonaventure has been literally trimmed away, thus demonstrating the fact that, in the picturesque at least, it is not always in the power of art to improve upon Nature.

Though constantly threatened from the commencement of the war till its evacua-

THE SAVANNAH, AT AUGUSTA.

tion at its close, Savannah was so fortunate as to escape attack. Since the war her citizens have been equally fortunate in being able to preserve her municipal government in the hands of her own people. A wise and prudent administration of her affairs, together with the business enterprise and energy of her citizens in reopening and extending the old channels of commerce, and in inviting and providing employment to capital and enterprise from abroad, has given an extraordinary impetus to the growth and commercial prosperity of the city, which, with the great natural advantages of her position and the accomplishment of the great enterprises of internal improvement with which her interests are identified, afford the most encouraging assurance of a prosperous future.

Augusta, which lies at the other extreme of the navigable waters of the Savannah, was settled only two years later than its seaward rival. Like Savannah, it was laid out under the personal supervision of General Oglethorpe, to whom it is indebted for its name, given in honor of one of the English princesses. It is situated on a broad plain. The wooded and winding Savannah waters one of its sides; handsome villa-crowned hills environ it on others. The taste which has made Savannah one of the handsomest of cities is apparent here also in its broad avenues richly shaded with antique trees. The recent war laid no devastating hand on its handsome streets or its embowered villas; unlike so many of the Southern cities, it stands with the beauty and grace that the years have given it, unimpaired by misfortune and uninjured by firebrand or assault. But it has not always been so fortunate in escaping the horrors of war; for, during the Revolution, it was of so much importance as a military post as to lead to several desperate battles for its possession. The vindictiveness that characterized the war of the Revolution all through the South was exhibited here. In 1780, the city was in the hands of the invader, and the patriots made a gallant effort to retake it. But they failed; and the British commander was so exasperated at the attempt that he ordered the immediate execution of a number of prisoners in his possession.

The most beautiful of its avenues is Greene Street, which is lined with fine mansions. Tall, spreading trees not only grace the sidewalks, but a double row, with grassy spaces between, run down the centre of the ample roadway. This sets beautiful park-grounds before every man's door; and the children playing under the trees, and the roaming cattle that are allowed to gather in the grateful shade, give the scene a domestic peace that is very charming. Here stands the City Hall, a really fine building of venerable age, set in an ample green amid tall trees, and having about it an air of dignity and repose. The building and grounds are kept with scrupulous care, and the scene has more of the rich, quiet charm that pertains to an English university-town than is usually found in our rude, new-made American cities. A tall granite column standing before the hall in the green of the roadway, commemorating the signers of the Declaration of Independence from Georgia, adds dignity and finish to the picture. The main business-

VIEW OF AUGUSTA, FROM SUMMERVILLE.

street is also wide; it is lined with handsome shops, in which may be noted abundant signs of activity; and it is thronged with great crowds of vehicles from the country.

Augusta is an important cotton-market, its situation at the head of navigation on the Savannah giving it good facilities for shipping. Hence cotton centres here from all the surrounding country; it comes in the shipping-season in vast abundance, both by rail and by wagons. At this period every road is crowded with huge vehicles drawn by four and six mules, and piled high with the precious merchandise, wending their way toward the river, while the streets of Augusta are thronged with these vehicles in picturesque confusion. Active scenes are witnessed on the banks of the river, where small stern-wheel steamers come up and bury themselves to their smoke-pipes in cotton-bales. The groups of boats shown in the engraving illustrating this scene are just below the long and handsome bridge which connects Augusta with the town of Hamburg, on the South-Carolina side of the river. The Savannah, although at the head of navigation, is wide at this point, and its shores are picturesque. Along the high banks upon which Augusta is situated are rows of old mulberry-trees, the trunks of which are covered with warts and knobs, and their gnarled, fantastic roots exposed by the washings of many freshets. Facing these trees are many pleasantly-situated cottages and villas, with very charming prospects of the river and the green slopes of the opposite shore.

We give a view of Augusta from Summerville, a suburban town of handsome villas, situated on high hills two or three miles from the city. A line of horse-cars runs from the town to the summit of the range. Here are situated many villas and cottages, embowered in trees, with broad verandas, handsome gardens, and many signs of wealth and culture. The scene is more Northern in its general features than Southern; the houses are like the Northern suburban villas, and the gardens not essentially different, although the Spanish bayonet—that queer horticultural caprice, with its bristling head of pikes—shows a proximity to tropical vegetation. These heights form a part of the famous red sand-hills of Georgia, and a characteristic feature are the rich red tints of the roadways.

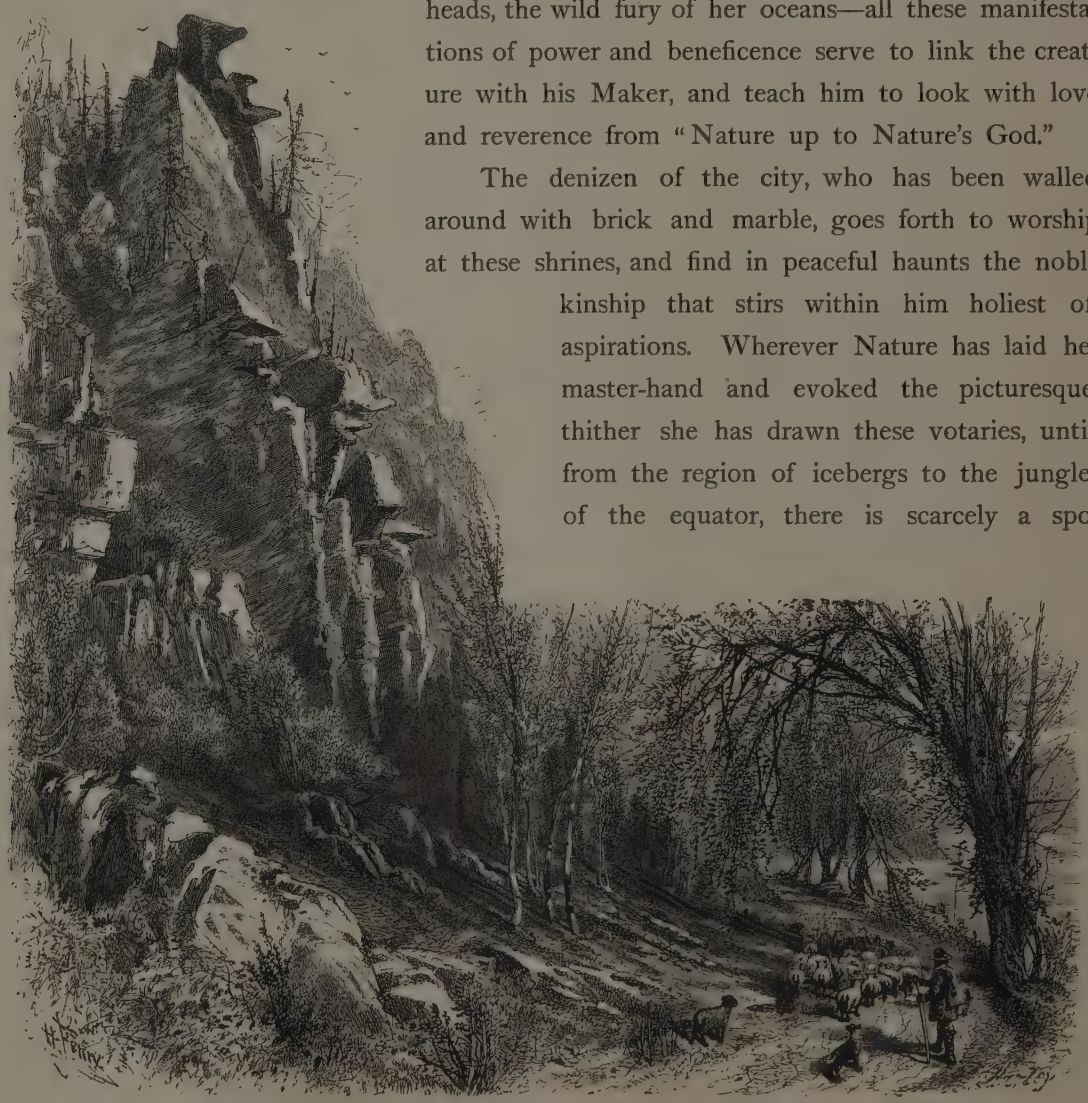
Augusta has been quietly solving the problem whether cotton fabrics can be manufactured profitably in cotton-growing sections, by establishing and successfully working a large factory, which now employs over five hundred operatives. A canal, which brings the upper floods of the Savannah to the city at an elevation of forty feet, supplies ample water-power for factories, and is encouraging an extensive embarkation into manufactures. It is nine miles long. The United States have an arsenal at Augusta, on the Summerville hills. Here, during the war, the Confederates built extensive workshops and powder-mills, which now have a curious interest to the visitor. The population of this city, according to the census of 1870, was over fifteen thousand.

THE FRENCH BROAD.

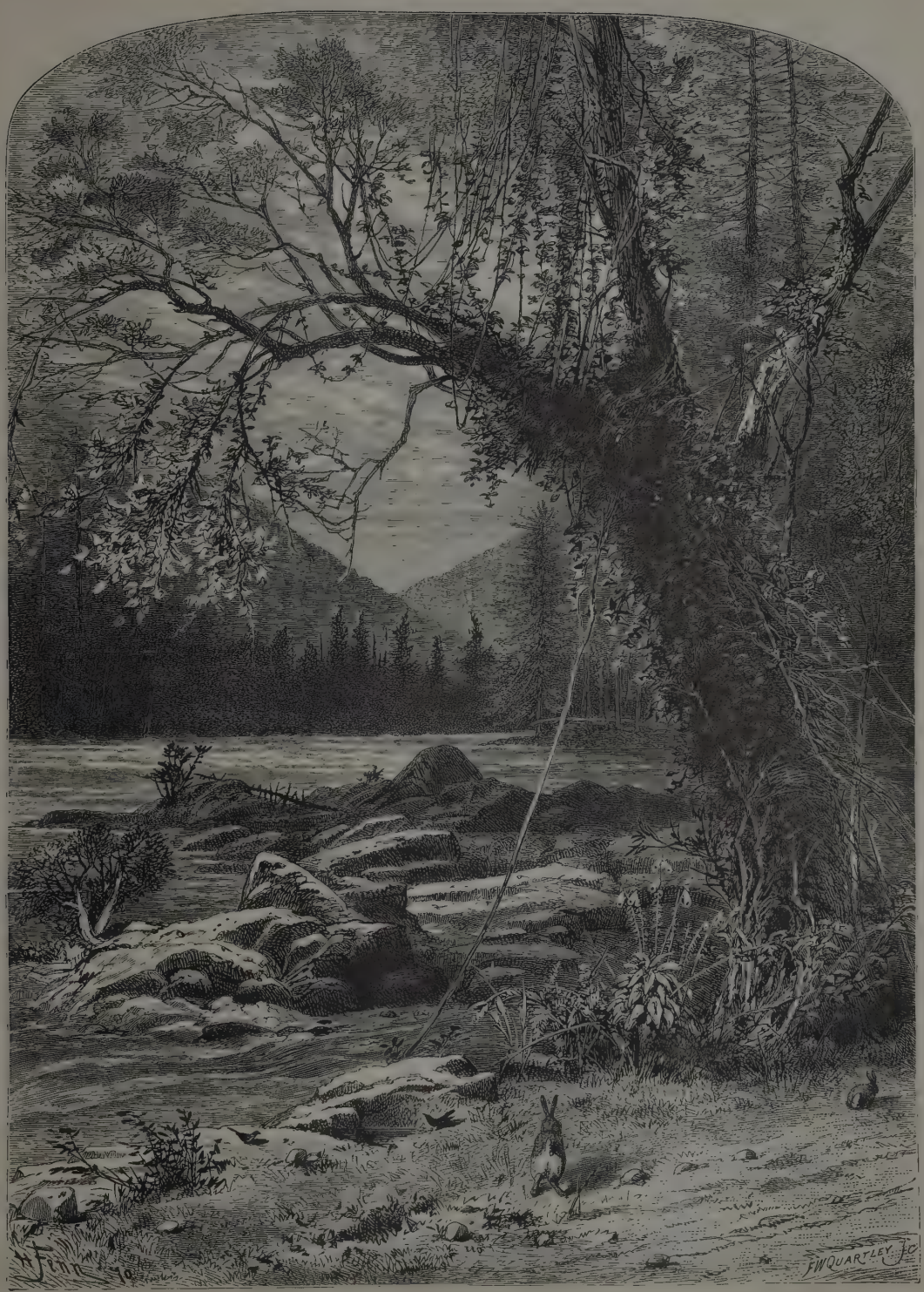
WITH ILLUSTRATIONS BY HARRY FENN.

NATURE seldom repeats herself. In all of her wild vagaries, on river, plain, and mountain, there is observable the same diversity of outline and expression that is to be seen in the highest type of creation—man. The scenery which springs forth with such marvellous variety at her magic touch—now rugged, now grand, now full of grace and beauty, now calm as the ethereal blue, never palling upon the eye—the music of her water-falls, the solemnity of her forests, the reverberations of her mountain-heads, the wild fury of her oceans—all these manifestations of power and beneficence serve to link the creature with his Maker, and teach him to look with love and reverence from "Nature up to Nature's God."

The denizen of the city, who has been walled around with brick and marble, goes forth to worship at these shrines, and find in peaceful haunts the noble kinship that stirs within him holiest of aspirations. Wherever Nature has laid her master-hand and evoked the picturesque, thither she has drawn these votaries, until, from the region of icebergs to the jungles of the equator, there is scarcely a spot



Paint Rock, on the French Broad.



THE FRENCH BROAD.

replete with attraction that has not at some time been the abiding-place of the tourist and stranger.

Such is eminently true of our own America; and yet, in the vastness of the continent, new beauties are being continually discovered, and points of interest are becoming places of resort, which, but a few years ago, were known only to the explorer or the local inhabitant. The Adirondacks, the Yosemite Valley, the cañons of the Western mountains, the wilds of Maine—these, and other localities, are becoming as familiar to the summer traveller as are the fashionable neighborhoods of Niagara, Memphremagog, or the White Mountains.

Still another section of the country which seems destined at no distant day to become a place of recreation, and to attract the artist and lover of Nature, is that portion of Western North Carolina through which course the beautiful waters of the French Broad River and other mountain-streams, and which may be described in general terms as the table-land of the Blue Ridge.

The fame of the beauty and the sublimity of the scenery is extensive, and the realization does not belie the report. Tall, grim, old rocks lift their bald heads far, far toward the heavens, in all the sublimity of solemn grandeur; while in the vision of the distant lowlands, that may be enjoyed from this summit or that, is a soft, sweet delicacy which breathes almost of the celestial, and makes one feel unconscious of aught save the panorama of loveliness before him.

Indeed, it would seem as if Nature had selected this region for the display of her fantastic power in uplifting the earth, and giving to it strange shapes and startling contrasts—in imparting curious physiognomies to the mountains and evoking melody from the water-falls.

The locality comprises about eight thousand square miles of territory, and, though settled more than a hundred years ago, and a great pass-way from the West to the East and South, has not yet seen a single railway penetrate the solid walls that form its border. The old-fashioned stage-coach still lumbers along the mountain-turnpikes, and holds undisputed sway on the flower-lined road that follows the course of the river; and the locomotive lingers at each portal, as if it were sacrilege to break the silence of the spot. Perhaps it is best that it is so, for there is certainly a shadow of romance in travelling through these solitudes in the good old style of our forefathers, and there is often a keen relish in experiencing the primitive customs and semi-aboriginal comforts of this wild region.

In journeying to this "land of the sky," the traveller from either North or West will find it convenient to approach from East Tennessee, and leave the cars at Greenville, the home of ex-President Andrew Johnson. Here a stage may be taken, which carries him along under the brows of hills and mountains, crowned with the Canada balsam, the Norway spruce, the hemlock, and white-pine. On the one hand he will catch

MOUNTAIN ISLAND

glimpses of distant valleys, rich to repletion, in which clusters of farm-houses dot the prospect; and on the other tower tall peaks, that have no rivals this side of the Rocky Mountains. A drive of a few miles brings him to a range known as the Iron or Great Smoky Mountains, and here he passes under the shadow of that curious formation known to the tourist as Paint Rock. The French Broad, likewise, bursts upon his view in all its wild beauty; and from this point to Asheville, in North Carolina, and beyond, the scene is one of mingled loveliness and grandeur.

We linger briefly, however, before pursuing the journey, to describe the river, of which it may be said that, in all this gallery of Nature's strange fantasies, none possess

A Scene on the French Broad.

so many characteristics at once peculiar in themselves and attractive to the tourist and scientist as the French Broad.

In the Indian vernacular, it was originally known as Tselica; but the Cherokees now call it Tockyeste, signifying, and not untruthfully, "The Little Roarer," or, as translated by some, "The Racer." Its present name is said to be derived as follows: "In the early settlement of the country, a party of hunters left what was then Mecklenburg, North Carolina, for the mountains. Crossing Broad River in Rutherford County they so named it; the next they called the Second Broad, and the third Main Broad. Then, crossing the Blue Ridge at Hickory-Nut Gap, they came to a stream which

"THE LOVERS' LEAP"—APPROACH BY NIGHT.

they called Cane Creek, from the abundance of cane growing on its banks—a singular thing in the mountains. Following this branch, the hunters came to a larger and broader river, into which it emptied, and named it the French Broad, because all of the country west of the Blue Ridge was then held by that nation."

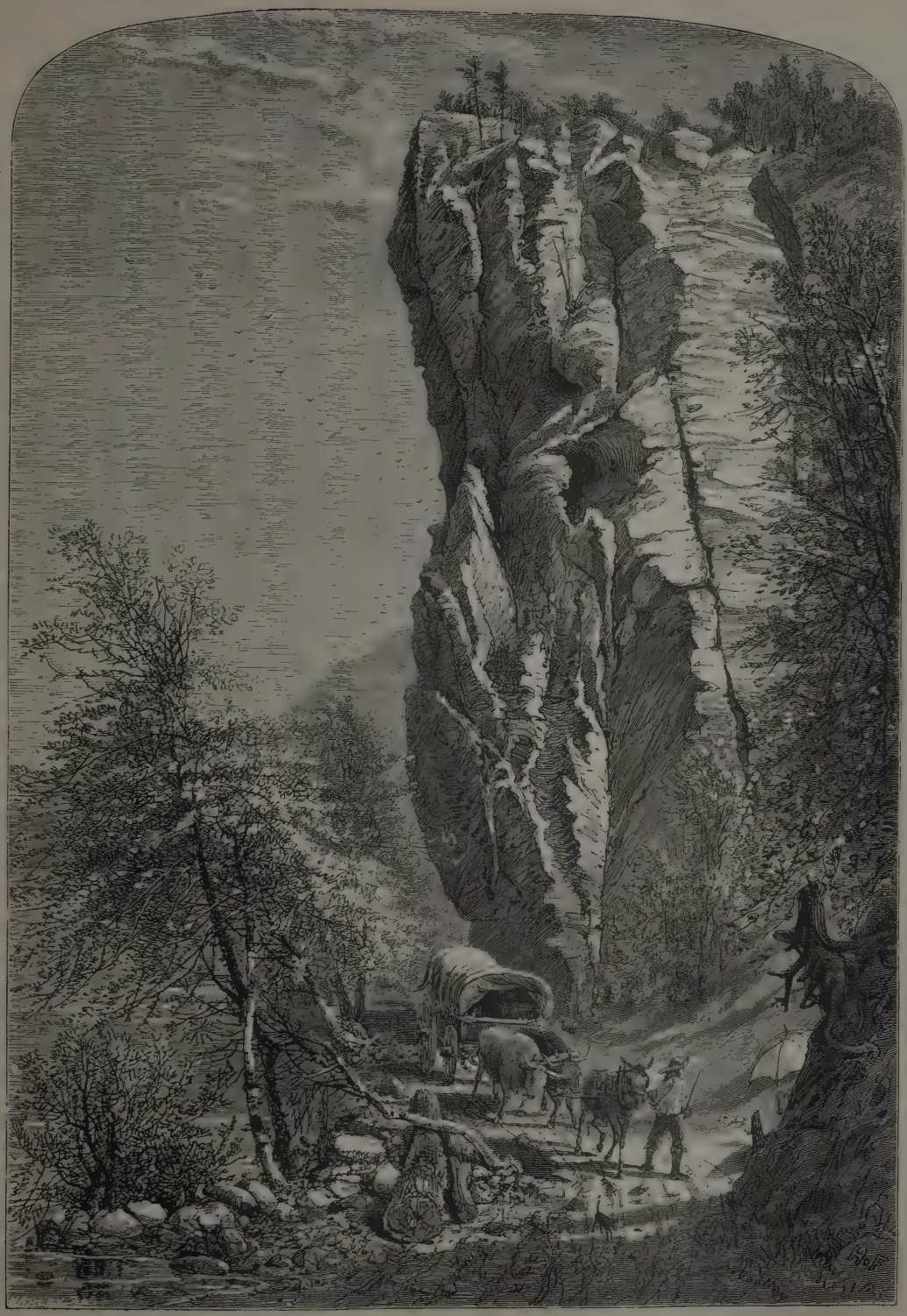
It rises in the Blue Ridge, on the South-Carolina line, but a few feet from the head-waters of the Congaree, on the south side of the divide. Thence it flows northward to Tennessee, the first forty miles of its journey being through a broad, fertile valley, famed for its beauty of scenery and fertility of soil. The route from this direction is perhaps the most comfortable by which one can approach Asheville.

These upper waters of the French Broad are now a favorite place of resort, and the traveller will find at Flat Rock numerous summer residences of wealthy Carolinians, where art and Nature have combined to make one of the loveliest localities in that section of the country. Cæsar's Head, near by, is a lofty mountain, one side of which is a perpendicular precipice of great height, from which may be had an extensive view of the upper portion of South Carolina. An hotel is erected within a few rods of the precipice, and, as may be imagined, it is a cool and delightful spot in which to spend a summer vacation.

In approaching Asheville, the scene changes; the hills press close in upon the river, and the rapids grow more and more furious, until they make their final plunge at Mountain Island. This singular formation is caused by the river forcing its way through the ridge on each side of a knob, from fifty to seventy-five feet in height. The fall, at this point, is about forty-five feet, and the road, which above runs almost into the river, below skirts a dark and solemn abyss. The view by our artist is taken just above the falls; yet, beautiful as is the picture, neither pen nor pencil can do justice to the real grandeur of this mountain-scene.

The geographical centre of this French-Broad region is Asheville, a delightful town, located on a hill above the river, two thousand two hundred and twelve feet above the level of the sea. The view here embraces, on the one side, seemingly interminable ranges of mountains, from which at least a hundred peaks rise to hold communion with the clouds; and, on the other, a beautiful valley, where courses the river, not, as yet, pent up within its rocky walls and foaming on in its mad career.

"The soil of this region is singularly fertile. This is due in the valleys to the wash from the mountains, but many of the mountains of this interior basin present the strange anomaly of being fertile to their very tops. It is a singular fact respecting this country that the sharp-peaked mountains are all poor land, while those which are rounded, and come up rather rolling and gently, are almost invariably rich. There are no lakes in this region; yet, from the peculiar formation of certain sections, it would seem that there once had been. The soil is generally a decomposition of granite, gneiss, and limestone. It is rich in potash, and contains undissolved particles of mica; its color



"THE LOVERS' LEAP"—AT EARLY SUNRISE.

is dark, and to the touch has a soapy feel. The tree-growth is chestnut, oaks, hickory, black and white walnuts, cucumber-tree, ash, linden, and sugar-maple. Dr. Curtis, a distinguished geologist, once said that he found every shrub and flower near Niagara Falls duplicated in Buncombe County, North Carolina."

The journey from Asheville down the French Broad to the Warm Springs, and onward for several miles, is one of the most picturesque that can be conceived; for at every turn new beauties are presented to the eye, that linger in memory long after the scene has faded from view. Our artist, in his several sketches of the route, has as faithfully represented its general character as a mere copy will permit. The road is a kind of terrace, resembling a shelf, dark woods and steep rocks overhanging it on one side, and, on the other, the river rushing, tumbling, and roaring over ledges of rock in its frantic haste. Occasionally, at a sudden bend, you will see the sweetest little dells in the world, canopied by the spruce and hemlock, by laurel and running vines, where the sunshine never intrudes, and the shade is a perpetual invitation to rest. Here and there a stream of water gushes from the mountain, and, trickling down the brown face of the rocks like crystal tears, hurries across the road in a little streamlet to join the grander flow that is coursing to the sea.

By moonlight the scene is singularly impressive. The old-fashioned stage-coach, creaking and swaying at every jolt; the driver, with his quaint speech; the notes of his horn, cheerily ringing out in the midnight air, and losing themselves in the distant echoes bounding from hill to hill; the opposite shores of the river, looking in the dim light like great black clouds that reach from earth heavenward; the curling billows at your feet, wallowing one after another upon the shore, and catching rainbow hues from the lamps upon your coach; the long, feathery lines of foam that have broken loose from the dark ledges in the river; the great rocks, like Lovers' Leap, that rise overhead, spectre-like, and sublime in their massiveness — all these are incidents of a midnight journey along the French Broad that the tourist will recognize as among the most charming of a lifetime.

The view by day is thus described in the *Southern Quarterly Review:* "Our road, an excellent one for the mountains, is cut out along the very margin of the river. Occasionally there is no ledge to protect you from the steep. The track does not often admit of two carriages abreast, and huge immovable bowlders sometimes contract to the narrowest measures the pathway for the single one. You wind along the precipice with a perpetual sense of danger, which increases the sublimity of the scene. The river, meanwhile, boils, bounds, and rages at your feet, tossing in strange writhings over the fractured masses of the rock, and plunging headlong with a groan into great cavities between, now leaping with a surging hiss down sudden steeps, which it approaches unprepared. Beyond you note the perpendicular heights, stern, dark, jagged, suspending a thousand feet in air

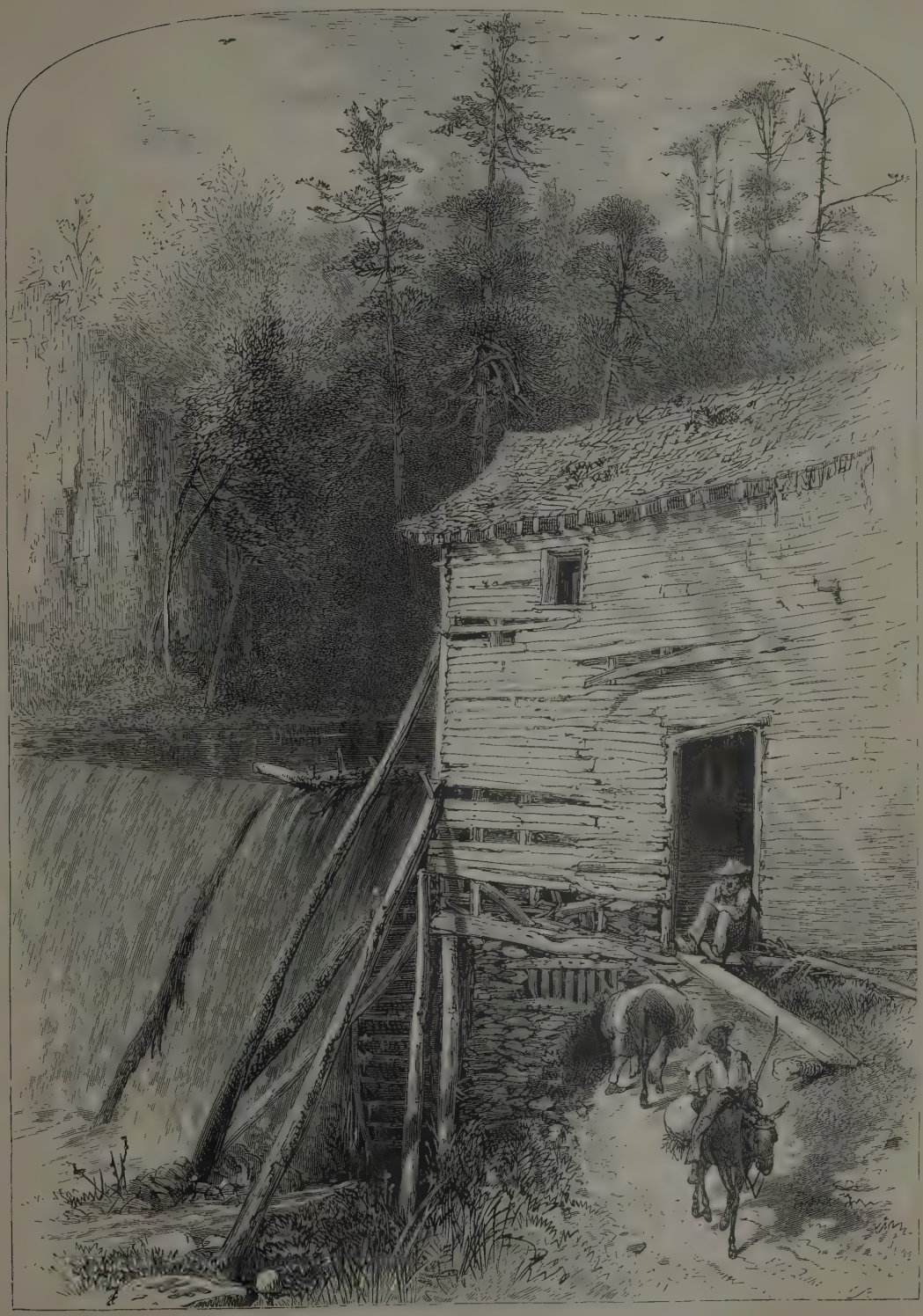
A FARM ON THE FRENCH BROAD.

"You find yourself suddenly in a cavernous avenue. Look up and behold an enormous bowlder thrust out from the mountain-side, hanging completely over you like an Atlantean roof, but such a roof as threatens momently to topple down in storm and thunder on your head. And thus, with a sense keenly alive to the startling aspects in the forms around you—the superior grandeur of the heights, the proof which they everywhere present that the volcano and the torrent have but recently done their work of convulsion and revolution—you hurry on for miles, relieved occasionally by scenes of strangely-sweet beauty in the valleys, where the waters are calm, where they no longer hiss and boil and rage and roar in conflict with the masses whose bonds they have broken, and where, leaping away into an even and unruffled flow, they seem to sleep in lakes whose edges bear fringes of flowery vines and the loveliest floral tangles, from which you may pluck at seasons the purplest berries drooping to the very lips of the waters.

"Sometimes these seeming lakes gather about the prettiest islets, that prompt you to fancy abodes such as the fairies delighted to explore, and where, indeed, the Cherokee has placed a class of spirits with strange, mysterious powers, who are acknowledged to maintain a singular influence over the red-man's destinies. A landscape-painter of real talent would find, along the two great stems of the French Broad, a thousand pictures far superior to any thing ever yet gathered on the banks of the Hudson or the groups of the Catskill."

Near the Tennessee boundary, and close by the Warm Springs, the road lies in the shadow of the bold mountain-precipices known as the Paint Rocks. These have a perpendicular elevation of between two and three hundred feet. Their name is derived from the Indian pictures yet to be seen upon them. In a poem entitled "Tselica," the late William Gilmore Simms has woven into beautiful verse a charming legend of the spot. "The tradition of the Cherokees," he says, "asserts the existence of a siren in the French Broad, who allures the hunter to the stream and strangles him in her embrace, or so infects him with some mortal disease that he invariably perishes." The locality at this point is strangely beautiful, and it is not a matter of wonder that the Warm Springs in the immediate neighborhood should be the summer resort of hundreds who seek health and the keen enjoyment which Nature here contributes to every sense.

These springs are among the natural curiosities of the Atlantic States; and in their curative properties, especially when employed in rheumatic and cutaneous affections, they are said to rival the famous Hot Springs of Arkansas. The temperature of the water varies from eighty to one hundred and ten degrees, the location of the various outlets apparently determining its grade. Analysis has demonstrated that it gives off free sulphuretted hydrogen and carbonic acid, and holds in solution carbonate and sulphate of lime, with a trace of magnesia. Baths of various kinds are arranged for the convenience of the visitors; and the fare, the trout-fishing, and hunting, are all that can be desired at a country watering-place.



OLD MILL.—REEMS'S CREEK.

The artist has graphically portrayed, in an accompanying picture, one of the many striking scenes upon the French Broad—a farm on a hill-side. The mountain lifts its lofty peak to mingle with the clouds; and its rough escarpment, taking new expression from every point of view, overhangs the famous Buncombe Turnpike, which winds along the base, skirting the river's edge. This road was built by the State, about forty years ago, and is the great route for hogs and cattle driven from East Tennessee to the cotton-growing section of South Carolina. Originally, it was the old Indian trail. Previous to 1860, as many as sixty thousand head would pass over this route during the winter; and these animals, with their human tenders, made a market for the surplus produce of the hill-sides. Still, as may be imagined from the sketch, farming under such circumstances is rather a precarious business; for, notwithstanding the fact that the soil is astonishingly rich in potash and vegetable matter—a black, fatty-looking loam—the

A Team on the French Broad.

difficulties that attend its cultivation require from the hardy agriculturist unusual patience and toil.

A low-country man, on his way to the Springs, once asked one of these farmers, who was something of a wag:

"Say, squire, you don't grow corn up yonder, do you?"

"Well, I reckon I do."

"How much do you get to the acre?"

"Nigh on to twenty-five bushel—shelled—thar or tharabouts."

"But how do you manage to plough on those hills?"

"Why, that's easy enough. Yer see, our animuls is born kinder irreg'lar-like—two short legs and two long legs—and the long legs allers travel on the down-hill side."

"Just one question more, squire—how in thunder do you plant it when you get among the rocks?"

A FERRY ON THE FRENCH BROAD

"Wall, that's easy too. We jes' load our shot-guns with the kernels, and stan' down here and shoot 'em right inter the ground, and thar it grows spontanous-like."

Not an unentertaining study of human and animal nature is likewise presented in the old-fashioned country "schooners," with their teams and drivers, which traverse the turnpike, carrying the produce of East Tennessee to the upper country of South Carolina. Ethiopia in her rags, and mule-power with all of its obstinacy, here find their fitting representatives. There is no spectacle more unique, in all the range of Southern reminiscences, than the mutual sympathy which seems to exist between man and beast on the road, in the camp, and at the corn-crib. A rope constitutes the sole electric current between hand and bit, and half a dozen strange sounds in the vernacular of the driver, now persuasive and now emphatic, serve to surmount every difficulty likely to present itself on the mountain-paths.

Another point of interest, but a short distance off the route, which has been depicted by the artist, is the old mill on Reem's Creek—one of the landmarks of the days when it was a struggle between the Indian and the pale-face as to which should hold the land. The creek rises in the Black Mountains, and empties into the French Broad; and the mill is historic as being the oldest building this side of the mountains. It was built there by the settler from whom its name is derived, as "a sort of fort, something of a store, and a little of a mill." The old ford of the French Broad is just at the mouth of the creek, and it is a part of the tradition of the neighborhood that Daniel Boone here first learned to shoot Indians and bears.

A few miles up the stream are some of the most beautiful valleys in the world, and on one of the mountain-spurs near by are cornfields, three thousand five hundred feet higher than the sea, which are said to have yielded fifty bushels shelled to the acre. Timothy, and other northern grasses, grow luxuriantly in this region; and within the last three or four years several cheese-factories have been erected, and are in successful operation, furnishing products which are pronounced to be equal to those of the North. Enterprising Germans and Americans are likewise engaged in utilizing the vast water-power of the French Broad, with the view of converting some of the magnificent chestnuts, oaks, maples, and walnuts, which abound, into implements of industry and household ornaments; and, doubtless, the time is not far distant when the whistle of the locomotive, the hum of the woollen spindle and loom, the noisy life of the forge and trip-hammer, and the whir of the factory, will be heard blending with the melody of the rushing waters, and adding new strains to those which Nature has sung alone in these wild scenes since the creation.

Among the Southern institutions which are fast yielding to the march of progress are the ferries on the public roads. In the olden time the cabin or ferry-house was the gathering-spot of the neighborhood, where corn-whiskey and river-news divided the honors of the hour, and frowsy loungers played "seven-up" on the moss-lined rocks.

The idle Cuffee was always sure to fill a place in the picture, and that place was invariably the soft side of a plank, where he slept with his upturned face to the sunshine.

The ferry itself was antique, and innocent of any but the rudest invention. It was cheap in construction, and the perfection of a simplicity that, so far as any improvement is concerned, might have originated among the antediluvians.

A rope extending to some convenient tree on either bank; a flat-bottomed boat and a stout negro—that was the machinery. You drove down, whooped, received an answering yell, possessed your soul in patience until the return of the crazy craft, and entered cautiously. The cable passed through a guide-post attached to the gunwale, and the ferryman, seizing it with a peculiar wooden key, gave it a twist, and commenced the process of pulling his freight to the other side. If any thing gave way, as was not unfrequently the case during a freshet, you drifted helplessly down the current, with the chances of being poled ashore in some out-of-the-way spot, or of a cold-bath in the river.

Happily, bridges are taking the places of these antique relics; the railway is carrying forward its civilizing influences, and in a little while the tourist may be whirled down the valleys of the French Broad in palace-cars that will make travelling luxurious, albeit it may rob him of half the pleasures that attach to the good old way.

It would require a volume to describe the many lovely scenes of interest in and around this picturesque locality—the caves, mountains, water-falls, and natural curiosities, within a day's travel, always attractive to the artist, poet, and lover of Nature, but there is one spot, that has been illustrated by Mr. Fenn, which deserves at least a brief notice. Hickory-Nut Gap is one of the great gate-ways to the French-Broad Basin. The approach from Charlotte, North Carolina, is by way of the pretty little town of Rutherfordton, from which point the visitor soon reaches the view of and is lost amid the wild, grand scenery that prevails on every side. His road and the track of the head-waters of Broad River are cut through massive walls of granite over a thousand feet high. Far off, in the distance, he looks in admiration at the beautiful falls of Hickory-Nut Creek. The sun glistens on the spray-like stream, splintered into showers of diamond-drops by a fall of three hundred and fifty feet, and throwing out a thousand rainbow hues. Passing on, he sees a remarkable, weather-worn peak, which is known as the Chimney Rock, reaching like a huge needle toward the heavens. The entire length of the Gap is about nine miles, the last five of which are watered by the Rocky-Broad River. That portion of the gorge, which might be called the gate-way, is at the eastern extremity, and is not more than half a mile in width. The highest bluff is on the south side, and it is here, midway up its front, that stands the isolated rock, of circular form, looming against the sky, and resembling the high turret of some grand castle. The entire mountain is composed of granite, and a large portion of the bluff in question hangs over the abyss beneath, and is as smooth as it possibly could be made by the rains of uncounted centuries. Over one portion of this superb cliff, falling

CHIMNEY ROCK, HICKORY-NUT GAP.

far down into some undiscovered and apparently unattainable pool, is a stream of water which seems to be the offspring of the clouds; and, in a neighboring rock, near the base of the precipice, are three shooting water-falls, at the foot of which, formed out of solid stone, are three holes, ten feet in diameter, and from forty to fifty feet in depth. The water in them has a rotary motion, and, when a stick or branch is thrown into it, it will disappear for some time, and then rise on the upper side of the pool, to disappear again in the same manner.

The mineral resources of this French-Broad region, and indeed of Western North Carolina, are almost boundless. For more than a hundred and twenty miles, the great Western Turnpike from Asheville crosses mountains of iron-ore, great masses of copper and lead, veins of silver and gold, and runs for miles upon strata of the finest-grained marble of every shade, from the purest white, through variegated, delicate, and rich rose and pink tints, to the sombrest and glossiest black. It traverses a region through which there are springs of every medicinal character; water-falls of immense height; chasms into whose seemingly bottomless depths one shudders to look; dark chaparrals of laurel known only to the wild beast; and forests in which the foot of the white man has never trodden. At the same time there are fertile valleys and sloping mountain-sides that yield the *largesse* of Nature's bounty. Such is the strange, rich, and picturesque country of the French Broad.

THE WHITE MOUNTAINS.

WITH ILLUSTRATIONS BY HARRY FENN.

The White Mountains, from the Conway Meadows.

WE suppose that all our readers know that the White Mountains are in New Hampshire, and that they are the highest elevations in New England, and, with the exception of the Black Mountains of North Carolina, the highest in the United States, east of the Mississippi.

The mountains rise from a plateau about forty-five miles in length by thirty in

breadth, and about sixteen hundred feet above the sea. This plateau, from which rise nearly twenty peaks of various elevations, and which is traversed by several deep, narrow valleys, forms the region known to tourists as the White Mountains. The peaks cluster in two groups, the eastern of which is known locally as the White Mountains, and the western as the Franconia Group. They are separated by a table-land varying from ten to twenty miles in breadth.

The principal summits of the eastern group are Mounts Washington, Adams, Jefferson, Madison, Monroe, Webster, Clinton, Pleasant, Franklin, and Clay. Of these, Mount Washington is the highest, being 6,285 feet above the level of the sea. The height of some of the other peaks is as follows: Adams, 5,759 feet; Jefferson, 5,657; Madison, 5,415; Monroe, 5,349; Franklin, 4,850; Pleasant, 4,712. The principal summits of the Franconia Group are Mounts Pleasant, Lafayette (5,500 feet), Liberty, Cherry Mountain, and Moosehillock (4,636). Near the southern border of the plateau rise Whiteface Mountain, Chocorua Peak (3,358 feet), Red Hill, and Mount Ossipee; and, in the southeast, Mount Kearsage (2,461 feet).

The rivers in the four great valleys that lead to the White Mountains—in the branches of the Connecticut Valley; in the Androscoggin Valley, that passes beyond these hills, commencing at a lake in Canada; in the Saco Valley, which begins here; and the Pemigewasset Valley, an off-shoot of the valley of the Merrimac—are fed by multitudes of little streams that force their way down steep glens from springs in the mountain-side, and flow through narrow valleys among the hills.

The course of these little rivulets, that break in water-falls, or whose amber flood runs over mossy beds among the forests, furnishes irregular but certain pathways for the rough roads that have been cut beside them, and by which the traveller gains access to these wild mountain-retreats.

Choosing among the valleys the one whose picturesque beauty soonest begins, the valley of the Saco, the tourist to the mountains finds himself at the northern end of Lake Winnipiseogee, surrounded by the Sandwich and Ossipee Hills, of which Whiteface and Chocorua are the loftiest peaks. Starting from Centre Harbor, a summer resort of considerable celebrity at the head of the lake, the regular stage-coach for Conway and the mountains is soon among high hills, the ruggedness of which begins at once to develop itself. Winding in and out among them, the stage passes now under the dark, frowning brow of a cliff, and afterward by some deep ravine, and then comes upon a lofty plateau which overlooks the amphitheatre of hills, till at Eaton the summit of Mount Washington is often distinctly seen, its base being concealed by objects nearer. The most interesting feature of the ride, however, is Chocorua, and, to those unacquainted with mountain-scenery, the first impression of this peak is very striking. Driving over the mountain-road in a hot summer afternoon, one watches the great hill-tops come up, like billows, one after another, from the sea of mountains round about, as the

MOUNT WASHINGTON, FROM THE CONWAY ROAD.

coach winds and twists among them. The soft afternoon light and atmosphere rest over the land, which, as the sun sinks lower, becomes streaked with pale bars of light when the sides and shoulders of the hills are developed by the failing day. All at once, over their sides, bands of a still softer blue appear, which, after interlacing the mountains for a while, are succeeded by a cool purple that steals up these hill-sides, and chases in its path the sunny haze; and this in its turn gives place to a pinkish gray of almost rosy hue, each tint changing from minute to minute, till they are all

Elephant's Head, Gate of Crawford Notch.

finally merged in a dark-purple tone, over which rests a tint as soft as the bloom on a plum, enwrapping each mountain-peak clear cut against the evening sky.

No one who has been much in a forest-region can have failed to perceive and enjoy the delicious fragrance that emanates from the resinous woods when the cool air of evening develops the exhalations from their still and warm foliage. Descending into the damp, fresh valley, and making your way through the woods, the aromatic odor of a hundred different growing things greets your nostrils. A turn in the road, and a bit of open meadow, and a gust of air as warm as mid-day envelops you. So the ride goes on till the great stars quiver in the dark vault of the heavens, that seem the deeper and

more mysterious from their framework of mountain-peaks. The hill-sides, fringed with trees that border the road, rise black and ghostly in the gloom, and only the tramp of the horses' hoofs on the hard ground, and the occasional remark of your fellow-passengers when they rouse up a little from their abstracted silence, break the intense stillness of the hour. One may not know the names of many of the mountains, but the peak of Chocorua, sharp and proud, crowns the view whenever the stage comes upon a bluff of height sufficient to overlook the landscape; and, after passing through a wood, it is always that lonely summit that rises first to the view when the stage emerges again under the open light of the stars.

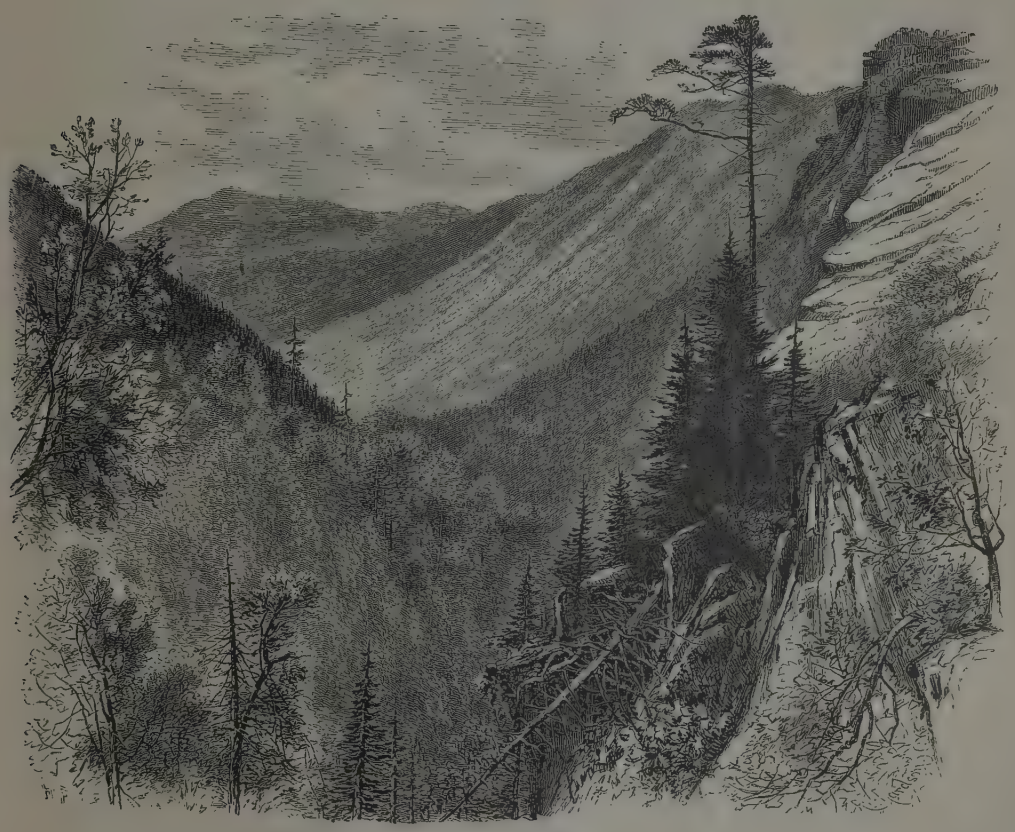
It is after this ride that the tourist strikes the valley of the Saco at Conway, and awakens the following morning to take the stage for North Conway and the mountains. After half a dozen miles' ride, leaving the peaks of Chocorua and Whiteface behind him over his left shoulder, Mote Mountain, with its long sweep, and the more broken outline of the Rattlesnake range, take the principal positions in the panorama, while the Ossipee Hills retire and retire toward the southern horizon. It is nine o'clock or thereabouts when the stage turns into the road on the edge of the level bank that rises about thirty feet above the intervales of the Saco, and, extending some three or four miles in length to the foot of Bartlett Mountain, reaches back two or three miles to the base of the Rattlesnake range and to Mount Kearsarge, and forms the little plain where the township of North Conway nestles against the mountain-side. No one who has ever visited this valley can fail to remember the exquisite view from this road when it first opened before them, and, varied slightly along the whole length of the ridge till arriving at the farther end of the village, the low hills at Bartlett shut off the chief features of the scene.

At the foot of the bank, and bathed in the morning sunshine, extends, far up the valley, a flat, velvety meadow of the freshest green, and dotted over it, in lines or little groups, rises the very ideal of elm-trees, as pure in form as a fountain or a vase. The Saco glimmers here and there in the morning light, its course nearly hidden by bands of dark-hued maples. Above these bands of trees are the purple slopes of Mote Mountain, which descends abruptly to the plain, when the steep face of the Conway ledges makes a sheer descent of from six to eight hundred feet to the valley of the Saco.

At the northern end of the valley, Mote Mountain bends down till it becomes a low ridge in what is called the "Devil's Arm-chair," and Bartlett slopes gently away to give place to a broad opening, across which, extending its entire length, lies Mount Washington and the other peaks of the White-Mountain range, each one being well separated from the other, and the outline of Mount Washington itself one of the best afforded from any position. The lower flanks of these mountains reach to the plain of the Saco, and, if one has watched this scene when the purple shades of evening gather on the mountain-sides long after the valley and the lower hills are wrapped in gloom, he

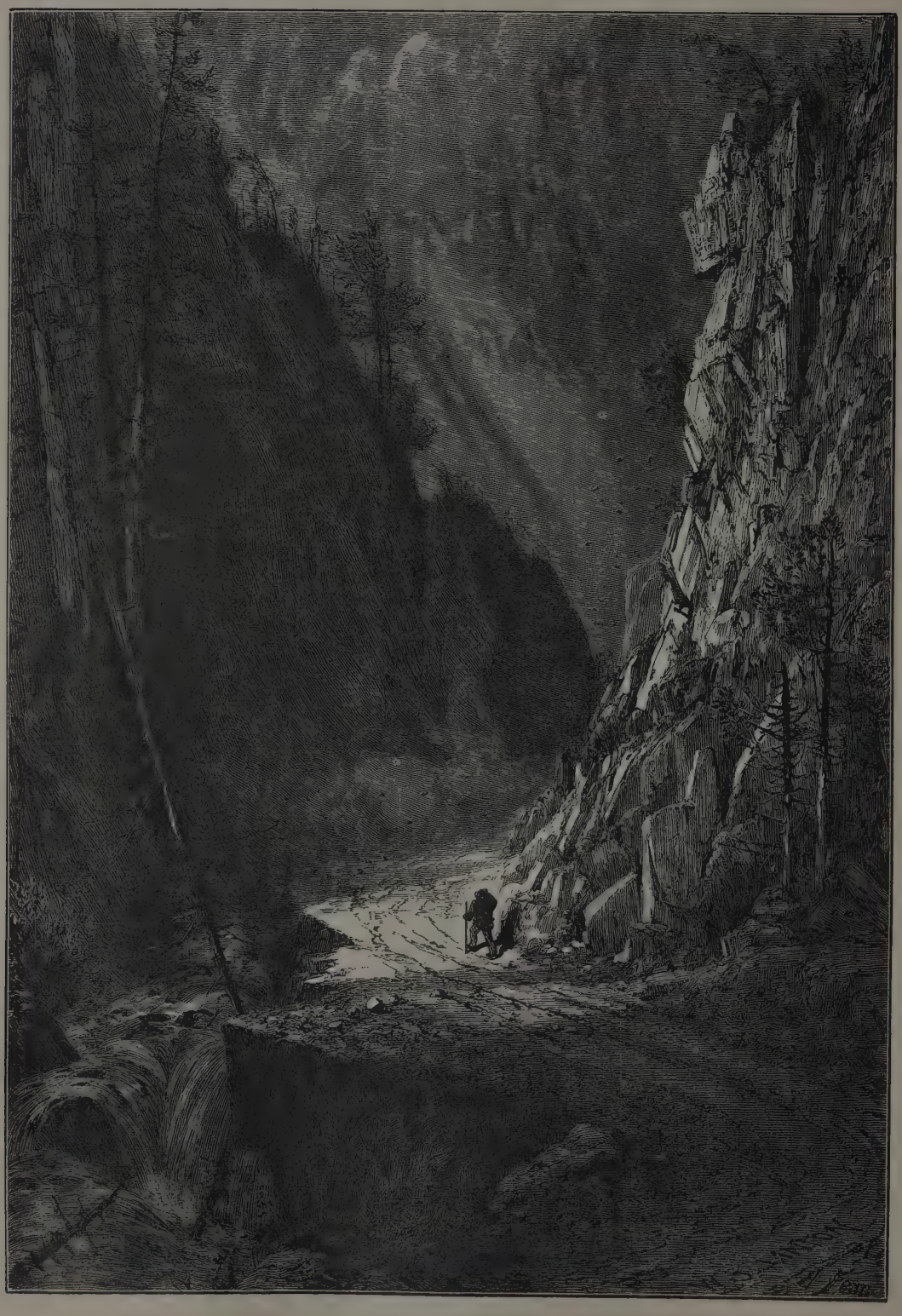
may have seen the pink hues of the evening sky still lingering on those mountain-peaks till they melt from the dome-shaped summit of Washington, and, with a little quiver of the light, its huge side joins the purple mass of the valley and the hills that lie beneath it.

Every view of the mountains has its own peculiar type of expression; and each aspect on the north side is more or less bold and abrupt, and the lines of the hills, though they are fine, grand, and impressive, are not graceful. But the character of the



The Willey Slide.

scenery at Conway is peculiar for its loveliness. Ruskin speaks of the curves of a snow-drift and the curl of a sea-wave being as beautiful lines as are to be found in Nature; and every one of these mountains, whatever the geological cause, certainly has its soft and hard side. In Conway you see the curves of the hills on their long swell, rising slowly from valley to summit; and, on the northern slope, the mountain-wave appears to have broken and rushed abruptly to the plain. Such is the general aspect of the landscape, and one can easily picture to himself a beauty of the scenery that is almost feminine, as it appears at Conway. Not only the hills, but the village itself, and the gentle meadows of the Saco, add to the soft charm of this very Arcadia of the White Hills.



GATE OF THE CRAWFORD NOTCH.

Here Nature seems for once to have thrown aside her harsh and severe character in this granite heart of New England, and to have abandoned herself to a genial and happy repose.

Mount Kearsarge, at the northern end of the Rattlesnake range, is the highest peak this side of the White Mountains, and rises in an almost perfect cone from the ridge on which Conway stands. The mountain is so near the town that the trees on its sides are distinctly seen, and partake of the greenish-purple hue of all near mountains. An excursion to the summit of Mount Kearsarge is the most important one in this neighborhood, and is easily accomplished on horseback, though for a strong and energetic person a climb is not very formidable, and is most pleasantly made in the afternoon, when, if there is moonlight, the beauty of a night on the summit and a return to the village in time for breakfast afford a delightful series of pictures for the mind to dwell upon in after-times.

A very pleasant day may be spent at the Conway ledges, which are perhaps the finest cliffs in the whole White-Mountain region. A broken rock, six hundred feet high, is colored with the most delicate shades of buff, purple, and gray, with small birches growing out from the clefts in the fractured surface of the stone here and there, where a little earth and moisture have collected. To the rear of the lower ledge, Thompson's Falls break over a spur of Mote Mountain, where the broken rock is thrown about in the wildest confusion. The highest of the ledges rises more than nine hundred feet above the bed of the Saco. A little scramble of a hundred feet or so through herbage and over rocks brings you into a shallow cave below the cliff, whence the rocks have been split away for nearly a hundred feet high, and the wide front of the recess is almost choked with trees. This spot, a favorite resort for picnickers, is named the Cathedral, and shares with Diana's Bath the interest of the visitor as a place of rest. Diana's Bath, a little farther up the valley, is formed from a succession of water-falls that, striking upon several tiers of rock, have worn wells into its substance, with perfectly smooth walls. The largest of these wells is about ten feet across, and as many deep. Looking into the clear depths of the water, one sees at the bottom small, round rocks, the cause of the excavation, which the water has used as pestles with which to scrape, and grind, and polish out these natural basins. Echo Lake, directly at the foot of Mote Mountain, has the character of numberless of these still mountain-ponds, hidden among the forests, deep and quiet.

Recrossing the river, on the slope toward the Rattlesnakes, one of the most charming spots from which to view Chocorua and Mote Mountain is Artists' Falls. This is one of those sylvan scenes of mossy rocks, babbling water, and beautifully-grouped trees, which artists delight to study in "bits," or to portray in its entireness, either looking up toward the brook, or off down the declivity to the mountains, across the valley.

Starting in the morning from North Conway on the mountain-road, you wind along the ridge of land that forms the town, till the valley becomes narrow and broken, and the hills abrupt. Brooks cross the road at several points, and the way winds round the lone flank of Bartlett Mountain, wooded from base to summit; the stage passes the beautiful falls at Jackson, and Goodrich's Falls, near where the Ellis River joins the

The Descent from Mount Washington.

Saco, and by that time is fairly among the high mountains, whose walls close down nearer and nearer upon the road which winds along the channel cut by the Saco. In the middle of the afternoon the abrupt sides of Mount Crawford bound the road on one side, and, by the time the stage has reached the little house that stands under Willey Mountain, the sunbeams have already stolen far up the mountain. A bugle blown at this spot starts the echoes, repeating them back and forth heavier

and louder than the first blast; one almost fancies it the music of a band of giants hidden among the trees on the mountain-slope. From the Willey House to the gate of the Notch the path becomes constantly narrower and sterner, though the common idea of the awfulness and almost horror of the passage of this portion of the journey is a somewhat erroneous one. The slope of the mountain-sides, here two thousand feet high, is very abrupt, and the narrow ravine is nearly unbroken for three or four miles, till one has passed the gate of the Notch; but, comparing this point with many others, its picturesque and romantic charm is the predominant impression. The river boils and plunges over broken rocks, and the narrow passage for the stage twists and winds, crossing the torrent at intervals over slender bridges, till, at the gate of the Notch, an opening, hardly wide enough to allow the passage of a team of horses, and the raging river, is bounded on each side by a sheer wall of rock, on the projections of which harebells and maiden's-hair are waving, and down whose steep sides leap the tiny waters of the silver cascade, whose course can be detected several hundred feet up the side of Mount Webster, sparkling in the sunlight.

Passing the gate of the Notch, you come out upon a little plateau of a few hundred acres, surrounded by hills, except at its upper and lower ends, which form the pass of the mountains, in the midst of which stands the Notch House.

The ascent of Mount Washington—the great point of interest, of course—is in many respects more satisfactory from this plateau than by any other route, as it gives a person really fond of mountain-scenery and romantic adventure as much experience of the kind as is agreeable, without becoming wearisome. To one unacquainted with mountain-scenery, the ascent by the bridle-path from the Crawford Notch affords more new sensations than can, perhaps, be gained anywhere else in this region in so few hours.

After breakfast on a sunny morning, fresh with an exhilaration one can scarcely conceive of who has not experienced the renovating effect of mountain-air, the tourist—equipped, if he be a prudent person, with a thick corduroy jacket, procured from the hotel; a large, coarse hat tied firmly under the chin by a strong cord; long, thick gloves, covering hands and wrists, and heavy underclothing—finds upon the piazza of the hotel a party accoutred like himself, mingled with girls in fresh morning-dresses, young men sauntering about with cigars, and elderly people sitting on benches and rustic seats, watching the party set off for the mountain. Interested glances are cast up the hill-sides, and the guides and old stagers are interrogated as to what may be the chances of the weather. Some persons tell stories of their adventures on the mountain the previous day, of mists that have caught them, winds that have nearly blown them from their horses, and they show their sunburnt wrists, and freely give advice about the way to manage or let one's horse manage himself, while the party is getting ready to depart. A couple of dozen horses and three or four guides are waiting below, among

whom anxious papas and nervous ladies are wandering, engaging a particular horse that is small or large, and a guide who seems particularly good-natured and knowing, to have an especial eye to them. Some of the tourists are already on horseback, walking around and trying their saddles; and, when every thing is in readiness, the cavalcade sets off up through the trees with which Mount Clinton is covered from its base at the foot of the Crawford House—looking, in their motley costumes of red, white, and blue, like a party of gypsies winding along the shady wood-path, which ascends two thousand feet during the first two or three miles, through a boggy, corduroy path so steep that often

Tuckerman's Ravine, from Hermit's Lake.

those members of the party who have got a little in advance of the others, appear to be almost overhead when they are seen emerging upon some open rock which breaks the forest. Here and there are springs of most delicious cool mountain-water, where the heated horses and riders stop for a moment to drink.

In the ascent the kind of trees changes constantly, turning from the yellow-birches, the beeches, with mossy trunks, and sugar-maples, in the valley, where are also mountain-ash trees, aspen-poplars, and striped maples, to white-pine and hemlock, white-birch and spruce, and balsam-fir, hung with a fine gray moss, much like that which drapes

the trees of the Southern forests, till you reach the upland with an arctic vegetation and a sort of dwarf-fir, so intertangled with moss that you can often walk over the tops of these trees as if over thick moss. On the ground is an undergrowth of ferns, brakes, and mountain-vines, and near the summit of Mount Clinton you come upon a region of dead trees, their branches and trunks bleached and white as ghosts, until you emerge on the barren summit of the mountain.

The path is rather to the north of the top of Mount Clinton, and we wind around it over bare rocks, when the first noble mountain-prospect opens before us. In front is the conical peak of Kearsarge, and seemingly quite near it are some small, shining lakes amid their hazy setting of mountains; behind rises Mount Willard and the group that surrounds the Notch, the clouds chasing wild shadows over their deep-blue sides. As we begin to descend to the narrow ridge which unites this mountain to the one next it, we catch a glimpse of a valley two thousand feet below, through which flows the Mount-Washington River at the base of a vast forest. On the left, at an equal depth, runs the Ammonoosuc, and you gain your first experience of mountain peril when the horses, planting their four feet close together on some rock in the narrow pathway, jump from this rough elevation three or four feet to the rocks beneath, where a slip or false leap would precipitate horse and rider down many hundreds of feet over the side of the mountain to sure destruction. The mountain on its almost perpendicular eastern slope is deeply seamed by a slide which happened during a severe storm in 1857. Passing around the side of Mount Monroe, which is little inferior to Mount Washington, one gazes into a frightful abyss, known as Bates's Gulf. Clouds and masses of vapor hang against its precipitous sides, and gigantic rocks strew the bottom of the gorge.

From Monroe is the first near view of Mount Washington, which rises in a vast cone, and shines with bare, gray stones fifteen hundred feet above, and across a wide plateau strewed with great numbers of bowlders. This elevated plain is about a mile above the sea. Patches of grass and hardy wild-flowers appear in the crevices of the rocks, and one comes upon small "tarns," or mountain-ponds, here and there, formed from springs or by the frequent storms that pass over these high regions. The "Lake of the Clouds," the head-waters of the Ammonoosuc, is the most beautiful of them. If you turn aside from the path a little way, the most wonderful gorge on the mountains, Tuckerman's Ravine, lies at your feet. Having crossed the plateau, the last four or five hundred feet are best climbed on foot, for the stones are so loose, and the ascent so steep, that it is best not to trust to horse-flesh. The rocks are clean cut and glistening, as if fresh from the quarry, among which scarcely a living thing can be discovered; but, by-and-by, as one emerges upon the summit, the delicate Alpine plant and little white flowers appear among the rocks. On the top of the mountain one can easily guard against the violence of the blast by crouching beneath the immense rocks which are

grouped upon its surface. Sitting on the leeward side of these protections, you can have a view more extended and exciting than any this side of the Rocky Mountains. A sea of mountains stretches on every hand; the near peaks, bald and scarred, are clothed with forests black and purple, and sloping to valleys so remote as to be very insignificant. Beyond the near peaks, grand and solemn, the more distant mountains fall away rapidly into every tint of blue and purple, glittering with lakes, till the eye reaches the sea-line ninety miles away.

Crystal Cascade.

The summit of Mount Washington, from the plateau at the Notch House, is five thousand feet high, and this plateau in its turn is fourteen or fifteen hundred feet above the sea. The traveller, to fully enjoy the view, should have a clear day, without too much wind; but, as no weather is so uncertain as the weather on Mount Washington, one may be pretty sure, in the course of a twelve-hours' stay, to have fog and sunshine, rain and storm.

Tuckerman's Ravine lies a few hundred feet down the side of the mountain, and the ridges in its rough, craggy wall form the faint, pink-gray lines that scar the summit of Mount Washington as seen at North Conway. If there is time, one can visit this ravine from the top of Mount Washington, and by a steep climb reach the summit again before night from the Snow Arch.

The ravine is an immense gully in the side of Mount Washington, the steep sides of which storms and frost are constantly changing, so that no vegetation has a chance

to take root, except the little yearly plant whose seeds may be scattered here, for the next winter's storms are sure to wash away the scanty growth. Against the head of the ravine, where it abuts against the summit of Mount Washington, the lofty wall sparkles with a thousand streams that filter through its crevices or run over its summit. The Snow Arch is formed at first from the immense snow-drifts blown over the top of the mountain, which settle against this wall of the ravine in piles sometimes a hundred feet deep, and in the short summer of this great altitude scarcely have time to melt from year to year.

The tourist to the summit of Mount Washington may descend, if he chooses, by the carriage-road to the glen, which is approached from Conway through the Pinkham Notch, that runs nearly parallel with the Willey Notch, north and south, and is separated from it on the west by two ranges of mountains, Mount Crawford being one of the peaks; and, on the other side, it is bounded by Carter Mountain and the range of Mount Moriah. The stage follows the course of the Ellis River, which connects this narrow valley with the broad intervals where the Ellis joins the Saco, till a little plateau is reached, from which rise the whole group of the White Mountains, without any intervening peak to conceal any portion of them, from their base to the summit—a sheer ascent from the valley of more than five thousand feet.

Here, by the road-side, not very remotely set in the forest, is the Crystal Cascade, whose waters fall in an unbroken sheet from the summit to the base of the rock.

It is a wonderful view which opens before the tourist when he enters the glen, either from Gorham, by the course of the Peabody River, or, coming from Conway and the Saco Valley, through the wild Pinkham Notch, by the rushing Ellis, with its Glen-Ellis Falls, one of the famous cascades of the mountains. The five highest mountains of New England lie before him, dense forest clothing their lower flanks, the ravines, landslides, and windfalls, clearly defined, and above all tower their desolate peaks. These little plateaus, scattered here and there—at the Notch House, at Franconia, and at the glen—seem to be darker than ordinary places, for the sky is cut off many angles above the horizon on every hand, and the sun has a shorter transit across the diminished heavens, leaving a long period of twilight both at morning and evening, even during fair weather; but, when the heavy fog-banks collect on these lonely mountain-sides, and the storm-clouds muster over every peak, the impression of solitary gloom is most impressive.

There is no spot in the mountains where one feels more keenly than here the changes in the moods of Nature. Watching the bright streams on the heights so far removed from man on the silent peaks, with

"Narrowing curves that end in air,"

the imagination wanders, till one scarcely knows what part of the impression is due to

its excited picturings, and what is derived from the visible world. In this valley lies the Emerald Pool, a sunny basin, bright and still.

Leaving Gorham, and following the stage-road to the west, you soon emerge on a hill-side, leaving the Androscoggin Valley behind; and, when about a mile up this

Mount Washington, from top of Thompson's Falls, Pinkham Pass.

little valley, at a turn in the road, you suddenly find yourself gazing up at the steep side of Mount Madison, which rises with a clear sweep from its base, washed by the rocky Moose River, and its flanks clothed with huge forest-trees to its gray and rocky summit. Now we see one slope of the mountain, and now another, as the road winds along, till at length the twin peak of Mount Adams, very like in form to Madison,

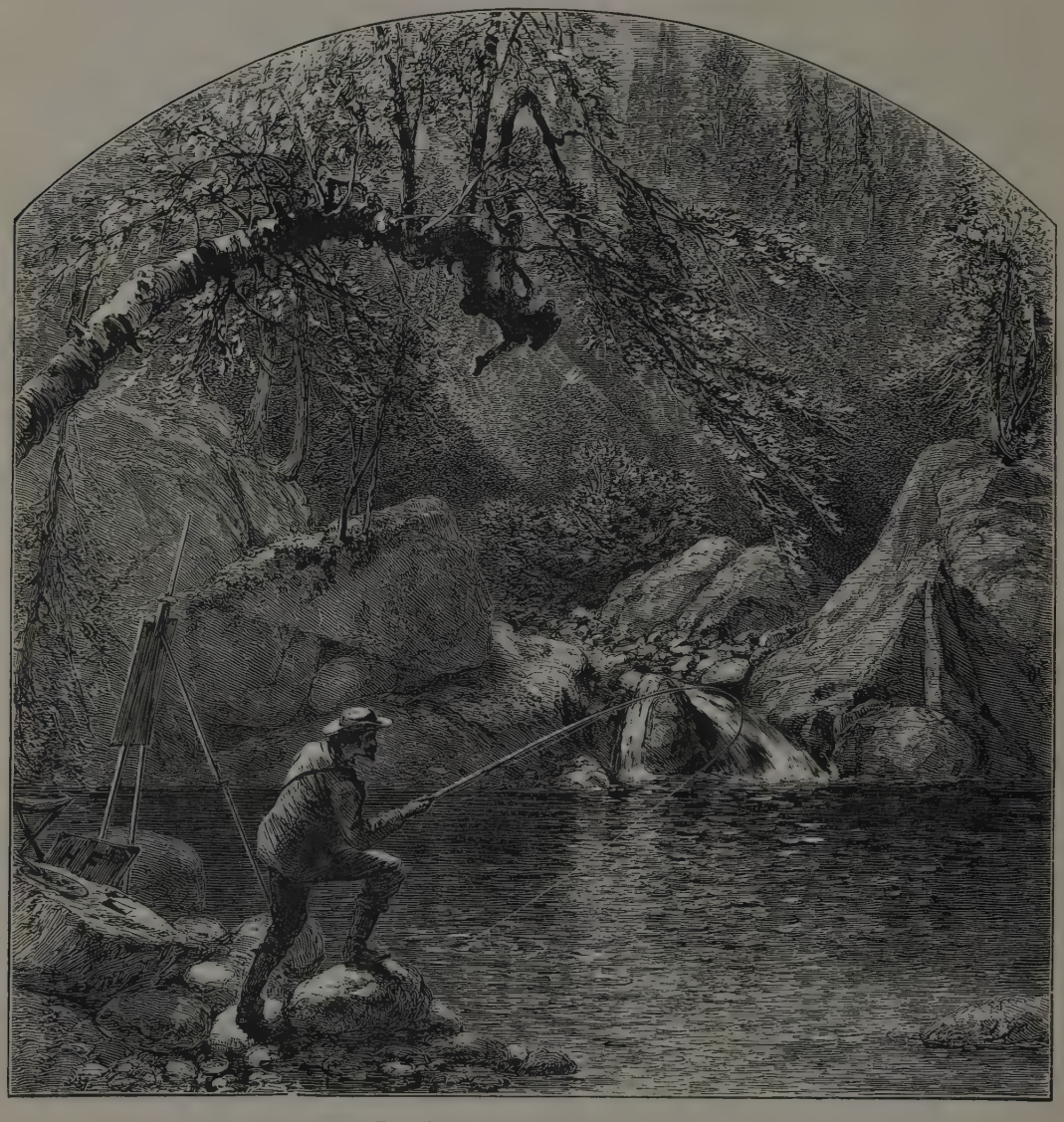
peeps over one of the immense shoulders of Adams, and soon its sides rise to view. Mount Jefferson, in its turn, comes in sight, and the deep gullies in its sides and its rocky flanks present the same unbroken and satisfactory slopes which had made Madison at first seem quite the ideal mountain of one's imagination. From the moment this journey is commenced at the hill-top in Gorham, it is interesting, but, to be fully enjoyed, it should be taken with the afternoon light purpling the mountain-sides, and when the large, picturesque trees, twisted and bent, stand, like sentinels, profiled against the broad, soft light of the hills. Driving along, one flank after another comes into view, shutting off the previous one, filling one with an ever-new surprise at the number and variety of these mountains, which yet are always immense in their sweep and grand in curve. The mountains from this side are much more abrupt than when seen on their western declivity, and the rocky structure of their formation is more conspicuous. At the Glen, flanks and ravines cut up the sweep of the hills, but here they rise in an unbroken view to a height greater than the walls of the mountains at the Willey Notch, and far more impressive. Emerging upon the road at Martin's, where now stands the Mount-Adams House, you see the whole great chain of the chief peaks, their forests speckled with light, and apparently so near that one almost feels like putting his hand upon their flickering sides across the densely-wooded ravine which winds up and up till it is lost in the gray distance of the heights of Mount Washington.

Following the borders of the Moose River, and striking across the Cherry-Mountain road to the White-Mountain House, a distance of thirty-two miles from Gorham, and leaving Jefferson behind, with the Israel River that conducts to the Connecticut Valley and to Lancaster, the traveller finds himself about seven miles beyond the Willey Notch, on the road to Franconia.

From the Crawford House, on its little plateau, turning northward, the road, passing through dense woods, after a short space enters the little valley, through which the infant stream of the Ammonoosuc issues from near the base of Mount Monroe. Nothing can be more charming than the trickle of waters by the side of these mountain-roads—"noises as if hidden brooks in the leafy month of June"—when the stage toils and creaks slowly over the rocky hills. We do not know the origin of the valleys, though they are probably volcanic, and the roads are apparently much more important than the little streams that rush along beside them, seeming like mere ornaments to the landscape; but, whatever their apparent uselessness, these mountain-torrents have carved out the natural roads through the hills, and it is by the ridges that bound them that nearly every person is made familiar with the glories and beauties of this region.

Following along the Ammonoosuc, the forest opens here and there, disclosing the White Mountains in all their beauty, until at the White-Mountain House, beyond the Ammonoosuc, the range of hills that connects the White Mountains with the Franco-

nia range, rises before you. This stream, which is often named the wildest in New Hampshire, on account of the rapid flow of its waters, that descend more than a mile between its source and where it joins the Connecticut, is broken by many water-falls, that gleam among the trees along the stage-road. The first town or even village that



Emerald Pool, Peabody-River Glen.

one passes after leaving Jackson is the little hamlet of Bethlehem, crouched close against a high, broad plateau, with great ranges of hills bounding it on every side. Along the valley toward the eastward rise the White Mountains and their attendant ranges; on the south, the range of the Franconia Mountains and Mount Lafayette, towering majestically above the rest, shut in the plain: while to the north appear the

mountains of Vermont. At one's feet on every side lie the valleys, and above this plain rise the mountain-peaks. Removed from the solemn gloom of the ravines, and from the exciting impressiveness of the mountain-tops, it would seem that dwellers in these elevated homes among the hills might have a healthier and serener life than anybody else.

Leaving Bethlehem, the road winds over a hill-top, and then descends into the valley of the Ammonoosuc, through which it winds its way till it reaches the narrow gorge, through which a branch of this river forces itself down; and the steep, difficult ascent begins into the Franconia Notch.

The Franconia range, though of the same group of hills as the rest, has a character as distinct from the austere forms of the White-Mountain range as from the soft swells of the Green Mountains of Vermont, and is eminently charming and picturesque.

A little way from the Profile House the traveller finds himself beside the Echo Lake, surrounded by hills, with Mount Lafayette, the highest peak of any in that region, overlooking it:

> "Mountains that like giants stand,
> To sentinel enchanted land."

In a fresh, cool morning, after a good night's rest under the comfortable roof of the Profile House, you wander down to the little pebbly beach that edges the lake-shore. Green woods tangled over your head protect you from the heat of the summer sun, and before you lies this little lake, each mountain clearly reflected in its pure depths as if in a mirror. While you sit enjoying the quiet beauty of the scene, and watching one or two eagles circling about the near hills, a note from a bugle sounds from the little boat that takes passengers to the middle of the lake. Immediately the echo repeats itself against the mountain-side, and, jumping from point to point, almost instantly the woods seem filled with a band of musicians till the echoes fade off and off:

> "Oh, hark! Oh, hear! How thin and clear,
> And thinner, clearer, farther going;
> Oh, sweet and far from cliff and scaur
> The horns of elf-land faintly blowing!
> Blow, let us hear the purple glens replying,
> Blow, bugle; answer, echoes dying, dying, dying!"

Leaving the lake, and following the path that leads back to the Profile House, you come to the broken, scarred wall of Eagle Cliff, that rises directly in front of the hotel. Eagles build their nests here, whence its name, and there are various traditions of children and lambs being snatched away and borne up to their lofty eyries. At Franconia there seems to be a natural impulse to quote poetry, and echoes of measured strains

Profile Mountain.

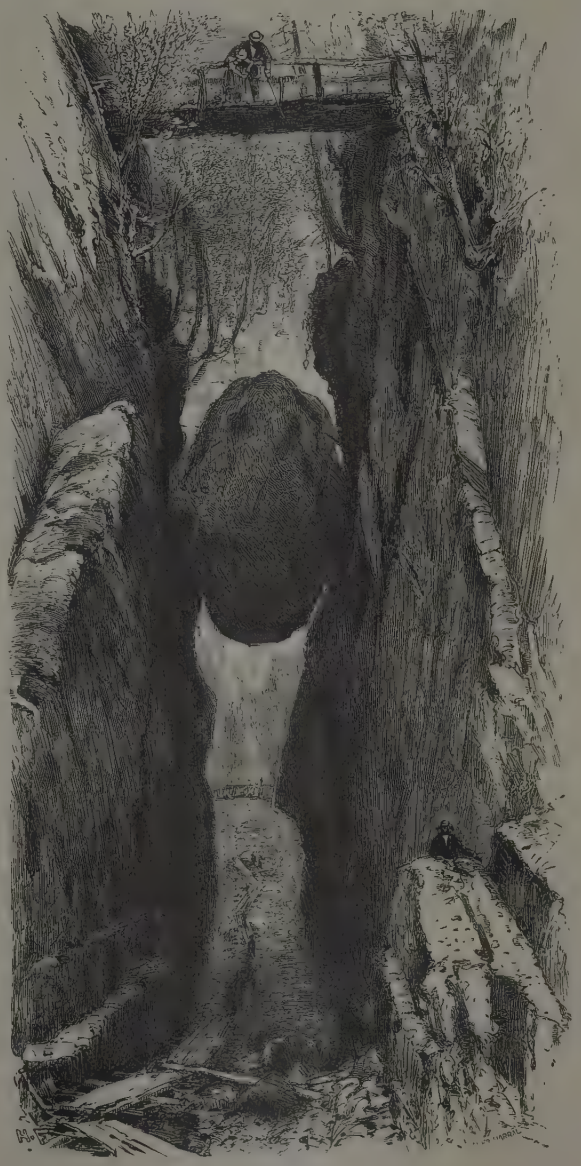
beat time to the pulses of light in the stirring tree-tops or to the rippling rivulets. If you love Scott, you can hardly fail to have different bits of his verse running through your head when you see—

"Crags, knolls, and mounds, confusedly hurled,
The fragments of an earlier world,
A wildering forest feathered o'er
His ruined side and summit hoar."

Nearly opposite Eagle Cliff, Profile Mountain rises abruptly from the margin of a little lake familiarly known as the "Old Man's Wash-basin," covered with forest-trees far up its side, over which, looking down the valley from its lofty position, nearly two thousand feet up the mountain, appears the wonder of this region, the "Old Stone Face," as firmly defined as if chiselled by a sculptor. Hawthorne has thrown over this natural object a charm as much greater than others have felt, as his genius was more subtle and penetrating than that of the rude dwellers of these regions, to whom yet the "Face" appears always to have suggested an idea of something mysterious. The rocks of which it is formed are three blocks of granite so set together as to form an overhanging brow, a powerful, clear-

ly-defined nose, and a chin sharp and decisive. Many of the pictures made on rocks by fissures and discolorations require an effort of the imagination to make out any meaning from the tangle of involved lines. Such are the figures on the ledge at Conway, and the Indian Chief on one of the mountains in the Notch. "Arm-chairs," "Graves," and "Seats," are always being pointed out, and give little satisfaction to eye or mind; but this view of the old man's profile is startling, and requires no description or suggestions to make it real.

Following the course of the Pemigewassett, whose source is in the "Old Man's Wash-basin," as that of its sister-stream the Ammonoosuc is in Echo Lake, with only the rise of a little mound between them to turn the waters north or south, one comes upon beautiful cascades, where the little stream rushes over its rocky bed, fashioning itself as it moves along through green moss, wet at noonday with the spray from the falling water, till you come to the Flume House, where the narrow gorge of the Pemigewassett River widens out to the long, flowing sweep of the open valley that closes no more, but sweeps down amid constantly lower hills till it reaches the sea, and the wild woods with their beauty are left behind in the mountains. Leaving the main stage-road at the Flume House, you strike into a rough wagon-path, following it where the sound of falling water attracts you not in vain.



The Flume.

Here you come upon smooth, flat rocks, over which flows the pure, colorless sheet of the mountain-water. Above this rocky stairway the water dashes over a green, mossy bed, the rich hues of which are seen in the sparkling sunshine that penetrates below the flood, revealing the golden and amber tints on sand and pebbly floor.

Cliffs above Dismal Pool.

Above this mossy bed we reach a fissure in the hill, with steep, rocky sides fifty feet or more in elevation and hundreds of feet long, narrowing at its upper end till it is only ten or twelve feet wide. Stepping from one stone to another, and then threading the narrow footpath, crossing and recrossing the ravine, alternately climbing rocks and traversing rude tree-trunks thrown across for bridges, at length a little point is gained in the narrowest part of the ravine. The rocky walls are dark, and the little stream bounds along between them. Emerald mosses hang from the sharp angles of the ledge or from the tree-trunks on its side. Just above the place where you are standing, a huge bowlder is wedged, seemingly just ready to slip from its uncertain resting-place, and this is the famous Flume.

The cliffs above Dismal Pool, near the Crawford House and the Willey Notch, are among the loftiest and steepest to be found in the mountains. Our illustration gives a very good impression of these stupendous precipices.

The White Mountains are even yet not fully explored, and every year adds some new mountain-pond, another cascade

or a glen, unseen till now, to the multitude of charming spots, which, with their composite associations, make this region delightful. Among these places, *new* in comparison with the Willey Pass or Mount Washington, is the Dixville Notch.

This remarkable pass, which has only recently attracted much attention, is in a group of hills some sixty miles to the north of the White Mountains; and, though as yet but imperfectly explored, the region is known to abound in scenery of the finest kind. Even the White Mountains, it is said, do not surpass it in sublimity and desolate and wild grandeur.

Following the track of the Grand Trunk Railroad by its course along the Androscoggin, at length the train turns into the more cheerful valley of the Connecticut River till you come to North Stratford. Here a stage conveys you to Colebrook, a flourishing village on the New-Hampshire side of the Connecticut, from which you can easily reach the Dixville range of hills, which are only ten miles from the village. The road lies through the best farming region of New Hampshire, and a person would never imagine there could be mountain-scenery of any degree of impressiveness near at hand. Suddenly the heavy walls of the Dixville Mountains show themselves, rising like thunder-clouds above the tree-tops of the forest. While you are admiring the gloomy sides of these hills, covered by dark woods, a turn in the road brings you in front of the savage opening of the Notch at its west end—a region of vast and mysterious desolation. The pass is narrower than either one of the great Notches of the White Hills, and the scenery is much bolder and sublimer.

Nothing can give an adequate impression of these bare and decaying cliffs, which shoot out into fantastic and angular projections on every side. The side-walls of this narrow ravine—for it can scarcely be called a pass—are strewed with *débris*. The only plant that appears to have maintained itself is the raspberry-vine. The great distinctive feature of this Notch is barrenness; and very great is, therefore, the transition of feeling from desolation and gloom, when you ride out from its slaty teeth into a most lovely plain called the Clear-Spring Meadows, embosomed in mountains, wooded luxuriantly from base to crown. It is in this Notch that you come upon one of the most characteristic formations of this region—Column Rock.

The glories, the beauties, the delights of this wild region might be dwelt upon for months and fill volumes, but little suggestions and slight hints are all that our space will allow us to give. We shall close, therefore, with repeating the advice of Starr King, the great authority about the White Mountains,* who declares that the right time to visit them is in the early summer: "From the middle of June to the middle of July, foliage is more fresh; the cloud-scenery is nobler; the meadow-grass has a more golden color; the streams are usually more full and musical; and there is a larger proportion

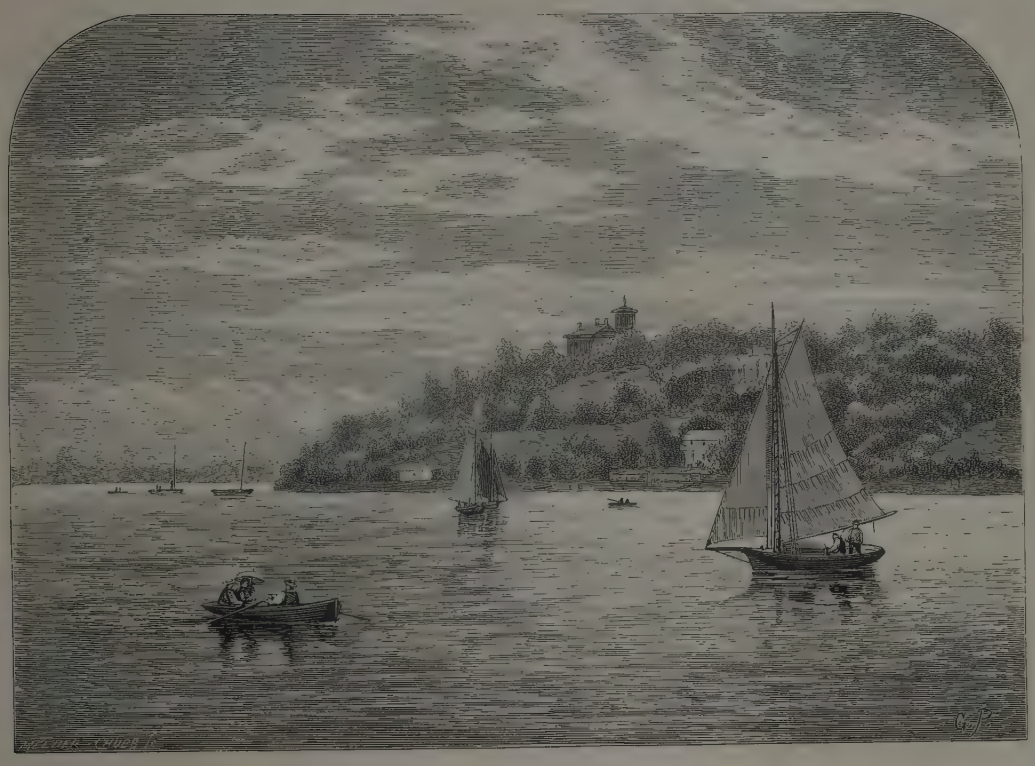
* "The White Hills." By Thomas Starr King.

of the 'long light' of the afternoon, which kindles the landscape into the richest loveliness. The mass of visitors to the White Mountains go during the dog-days, and leave when the finer September weather sets in with its prelude touches of the October splendor. In August there are fewer clear skies; there is more fog; the meadows are apparelled in more sober green; the highest rocky crests may be wrapped in mists for days in succession; and a traveller has fewer chances of making acquaintance with a bracing mountain-breeze. The latter half of June is the blossom-season of beauty in the mountain-districts; the first half of October is the time of its full-hued fruitage."

Column Rock, Dixville Notch.

THE NEVERSINK HIGHLANDS.

WITH ILLUSTRATIONS BY GRANVILLE PERKINS.



Mouth of the Shrewsbury River.

THE Neversink Highlands have the post of honor among the American hills. They stand near the principal portal of the continent—the first land to greet the curious eyes of the stranger, and to cheer the heart of the returning wanderer. The beauty of these wooded heights, the charming villas that stud their sides, the grace of their undulating lines, give to the traveller prompt assurance that the country he visits is not only blessed with rare natural beauty, but that art and culture have suitably adorned it. The delight with which the wearied ocean-voyager greets the shores that first rise upon the horizon has often been described; but, when these shores have a rare sylvan beauty that opens hour by hour to view as the vessel draws near—when, instead of frowning rocks or barren sands, he beholds noble hills clothed to their brows with green forests, fields and meadows basking with summer beauty in the sun, cottages nestling amid shrubbery, and spires lifting above clustering tree-tops—the picture possesses a charm which only he who first beholds it can fully realize. It is such a green para-

BEACON HILL, NEVERSINK HIGHLANDS.

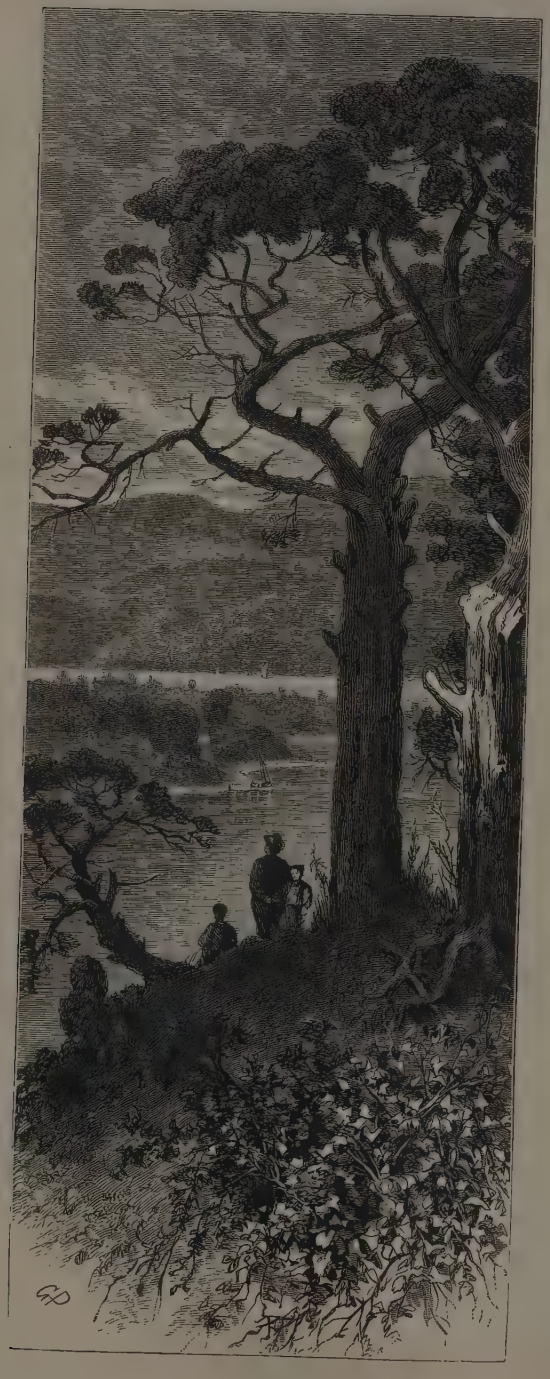
dise that the Neversink Hills offer to the gaze of every ocean-wanderer who enters the harbor of New York.

These highlands are situated in New Jersey, extending several miles along the coast in a southerly direction. At their feet flows the Shrewsbury River; beyond the river stretches a narrow strip of sand, upon which the surf of the Atlantic ceaselessly beats. This strip or tongue of sand extends northerly into the sea, somewhat beyond the reach of the hills, which, suddenly trending westward, form, in connection with the Hook, what is known as Sandy-Hook Bay. The ship entering from the sea stretches past this point

View from the Highlands.

of sand, leaving the hills to the left; but from their receding forms the voyager soon turns to greet the rising shores of Staten Island. There are two distinct bays to the harbor of New York. Staten Island and Long Island approach each other closely, and between them runs a small strait, known as the Narrows, which affords entrance to the inner bay; the outer bay, or Lower Bay, as it is commonly called, has upon its left the low, sandy shores of Long Island, upon its right a deep estuary, between the New-Jersey and Staten-Island shores, known as Raritan Bay. Shrewsbury River, which is probably more an estuary than a river, enters the sea between Raritan Bay and the Hook. Travellers proceeding by the Southern Railroad of New Jersey, or the

pleasure-party visiting the famous watering-place of Long Branch, land from the steamboat at Sandy Hook. The railroad runs along the narrow strip of sand, already mentioned, that separates the river from the ocean, giving the passengers charming views of the hills, such as that delineated in the steel-plate engraving accompanying this article. But the visitor who explores the river by boat enters its pleasant waters with beautiful, villa-adorned hills to the right, as illustrated in our initial engraving, and courses along at their feet, admiring the highlands as they lift above him on one side, and the superb stretch of sea on the other, the view of which the intervening strip of sand scarcely obstructs. Entering the river thus, we soon reach "Beacon Hill," crowned by a double-towered light-house furnished with "Fresnel" lights of remarkable capacity. The square tower has the most powerful light on the coast, the rays of which reach a distance of thirty-five miles, or as far as the altitude of the tower lifts the horizon. This light gives the mariner the first intimation of his nearness to our shores, just as the green slopes of the hill it surmounts greet him with the first show of land. This magnificent light is of French construction, was exhibited and secured the prize at the great French Exposition, and was purchased by our government at a cost of thirty thousand dollars. The light in the corresponding tower was manufactured in imitation of it, and, although upon the same principle, is scarcely so powerful. A visit to this light-house will repay us; the view from the tower is superb, and the magnificent lenses of the lamp are well worth our curious attention. The obliging light-house keeper will draw the curtain, and show, reflected upon the convex central crystal, an exquisite miniature of all the expanse



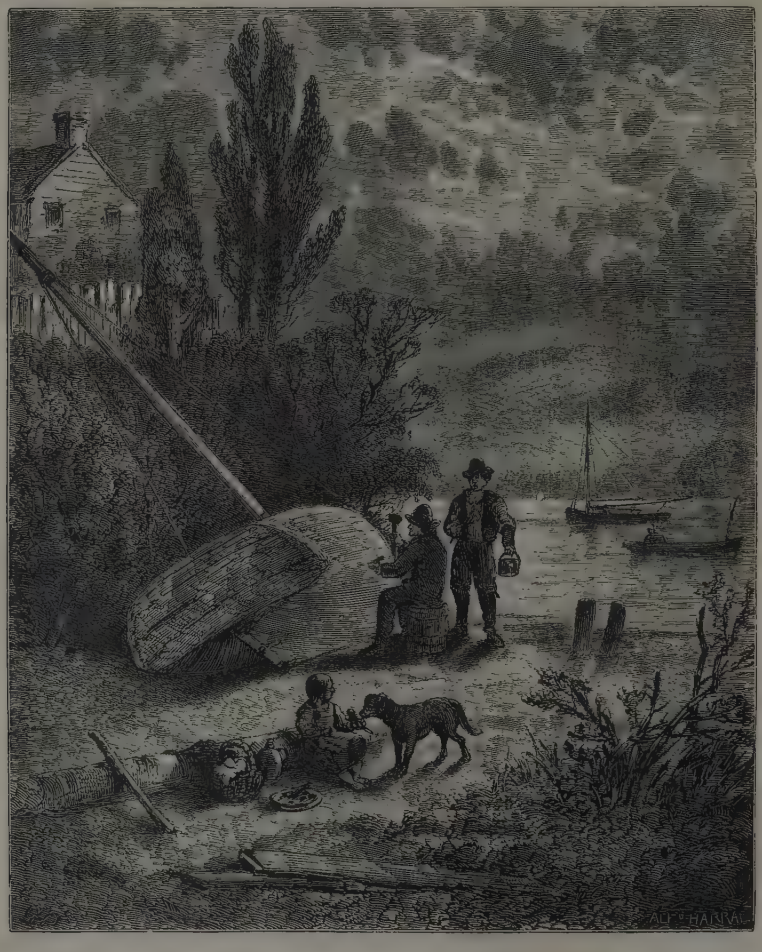
On the Highlands.

Boat-Landing.

Fairhaven.

of land and sea and sky—such a landscape as the most gifted painter would despair of being able to imitate.

Just beyond Beacon Hill is the little town of Highlands, where the hotels most do congregate. Here there is every charm to seduce the town-lorn citizen from his weary streets. He may wander amid the leafy retreats of the hill, once peopled by deer and other creatures of the woods, and now such a forest as that of Arden could scarcely excel: or he may sail on the smooth waters of the river, and cast his line for the bass

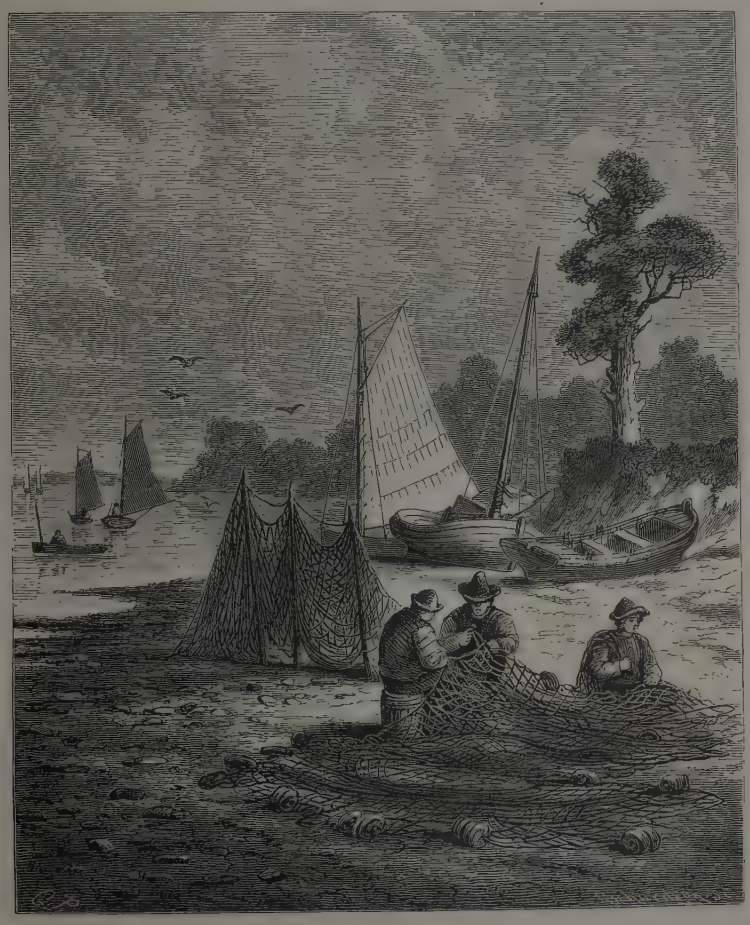


Calking on the Neversink.

and the blue-fish; or, crossing to the sandy beach where the surf of the wide ocean rolls in upon him, plunge into the breakers until his heart and his muscles gather freshness and strength from the brief battle with Old Ocean. It is a delicious and sometimes a stirring picture that may be seen from these hills. One may sit, fanned by great trees, inhaling the odors of grass and woods, and watch the far expanse of sea, on the surface of which ships ceaselessly come and go; and then at times rises the storm, and the fierce breakers come tumbling in upon the beach with a wild roar, bursting high into

the air in spray, while the ships go rushing by with furled sails like great, frightened birds.

Our course lies along under these hills, the river continuing narrow; but soon it widens, and presently we find two forks—one that keeps close along the sea, another that trends a little way inland. These forks are known locally as South and West Shrewsbury Rivers, but the geographies set down the southern fork as Shrewsbury River, and the western one as Neversink River. The latter is the most picturesque and



Mending Nets on the Neversink.

attractive, and it is the one our artist has followed. On both sides of the river we now have wooded shores, while the river broadens frequently into bays that are as handsome and nearly as wide as those of the Hudson. All along there are pleasant cottages, and on the distant, sloping hills cultivated farms. There are picturesque landings at little wharves thrust out from high, wooded banks; there are quaint little houses close to the river-shore, hiding away among trees; there is a club-house, with its array of boats; and presently we come to the busy centre of the great oyster-breeding region. The pleas-

AT RED BANK.

ant village of Fairhaven is an outgrowth of the oyster business. The river here is broad and shallow; the oyster-beds abound in great numbers, and at the proper season whole fleets of boats are engaged, at one time in planting, at another in gathering the wealth of the river-bed. The oysters planted here are mostly brought from Virginia; and, as the Virginia oysters are notoriously among the finest in the world, this fact may account for the favor which the Shrewsbury product—we never hear of Neversink oysters—enjoys in our market. Not only oystermen, but fishermen, are numerous here, for this estuary affords rare fishing-grounds; and everywhere are evidences that the river yields rich rewards to those who depend upon it. The houses, if rarely splendid, are in no instances poor or squalid, while the greater number are charming cottages surrounded by many evidences of thrift and taste. The shores here are interestingly varied by scenes of picturesque industry connected with the pursuits of the people; here may be seen a group of fishermen, mending their extended nets; there, a boat turned up on the beach, undergoing repairs; and these little insights into the occupations pursued amid these sylvan scenes are not without their charm.

We soon reach the most important town on the river. Red Bank lies at the head of navigation, and yet is situated on a water-course of wide expanse. It is probably the termination of the estuary, while the little stream that flows through narrow gorges and shadowy forests beyond, is all that may strictly be called a river. Red Bank is, in every sense, a pretty village, and, what perhaps is better, a thriving one. Without lifting so high as near the mouth of the river, the hills here are very charming, spreading away in flowing, undulating lines, and dipping to the water with many a sylvan grace. It is a town built up in the interests that pertain to a great metropolis, being a sort of entrepot for a large agricultural country, the products of which centre here for transportation to the city. In 1830, only two houses stood upon its present site; and now its avenues of cottages and villages extend for miles, while whole fleets of vessels are occupied in its commerce. It is a village without "slums," or unpleasant quarters; poverty would seem to be unknown within its borders. Its streets are shaded with arching trees, and lined with neat cottages; and all the prospects from the place are full of pleasantness. Handsome villas front the main avenues, the rear windows of which overlook the river and the green shores of its opposite boundary. Rarely do we find, in an American town, this union of thrift and beauty; for usually, where enterprise consents to inspire a people, its energy leaves rude gashes upon the landscape.

This section has little legendary or historical interest. It is included in Monmouth County, and hence it is near the scene of the famous battle of Monmouth, of the Revolution; and it was infested, during that momentous struggle, with predatory bands, who made general warfare upon the people. Its best legendary interest is derived from the pages of Fenimore Cooper's "Water Witch," many of the scenes of which were laid in Sandy-Hook Bay and upon the adjacent Neversink Hills. The reader of this delightful

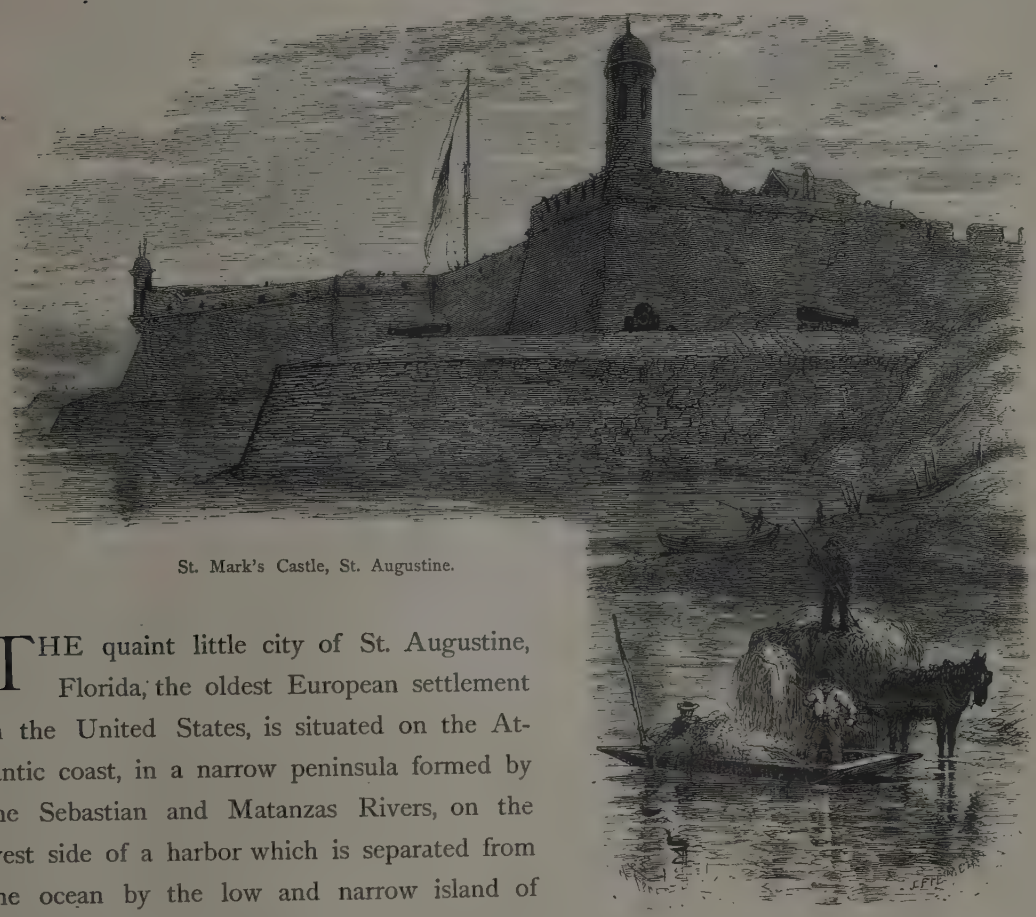
romance—the most truly imaginative that came from the pen of Cooper—will recall the strangely-named villa "Lust in Rust," built by the smuggling Dutch alderman upon one of these elevations, and the strange adventures of the Water-witch, guided by the mysterious sea-green lady, which glided in and out of a secret inlet then existing near the Hook, to the vast mystification of its pursuers. We learn that several times the sea has broken through the sandy stretch of land, making the Hook an island; such an inlet existed in 1798, which closed in 1800, and opened again in 1830.

In regard to the designation of these hills, there exists a fearful orthographical confusion. The word is sometimes spelled *Navasink*, sometimes *Navisink*, then again as *Nevisink*, and lastly as *Neversink*. The correct method can be determined only by a knowledge of its origin, and of this there appears to be some doubt. *Navasink* is supposed to be an Indian word, meaning "fishing-place," and, of course, applied to the river; but others claim that this is simply a common instance of a natural desire to find an aboriginal root for our nomenclature, and that the term is really Neversink, having been bestowed by the sailors, as expressive of the long time which these hills remain in view to the outward voyager. There is more romance and originality in the Indian term, but, so far, the weight of authority does not appear to be in its favor.

Old Bridge, near Red Bank.

ST. AUGUSTINE, FLORIDA.

WITH ILLUSTRATIONS BY HARRY FENN.



St. Mark's Castle, St. Augustine.

THE quaint little city of St. Augustine, Florida, the oldest European settlement in the United States, is situated on the Atlantic coast, in a narrow peninsula formed by the Sebastian and Matanzas Rivers, on the west side of a harbor which is separated from the ocean by the low and narrow island of Anastasia. It lies about forty miles south of the mouth of the great river St. John's, and about one hundred and sixty miles south from Savannah, in Georgia.

St. Augustine was founded by the Spaniards in 1565, more than half a century before the landing of the Pilgrims at Plymouth, and was from the start a place of note, and the scene of interesting historical events. Its founder, Don Pedro Menendez, was one of the most eminent men of Spain, and a famous commander during the reign of Philip II., by whom he was sent to Florida at the head of an expedition comprising thirty-four vessels and two thousand six hundred persons, to colonize the country and suppress a Huguenot settlement made in 1564 near the mouth of the St. John's. He landed at St. Augustine on August 28, 1565, established his colony, and then marched

to exterminate the Huguenots, which he effected with great vigor and cruelty, putting to death all his prisoners, "not because they are Frenchmen, but because they are heretics and enemies of God." Two years later, this massacre was avenged by a French adventurer, Dominique de Gourgues, who, with a small force of volunteers, attacked and captured the Spanish forts on the St. John's, and hanged his prisoners, "not because they are Spaniards, but because they are traitors, robbers, and murderers." De Gourgues, however, made no attempt to retain his conquest, but, after his deed of retribution was accomplished, sailed back to France.

Menendez was absent in Spain during this attack by De Gourgues, and did not return until the affair was over. He continued for some years longer to rule the colony, but finally returned to Spain, where his reputation for ability was so high that he was made captain-general of the navy, soon after which he died, at the age of fifty-five. His career in Florida, though stained with cruelty, was distinguished for energy and perseverance, and to him, undoubtedly, is due the credit of establishing the first permanent settlement in the United States. His selection of St. Augustine as a site for his chief town showed his good judgment. The situation was peculiarly favorable. The harbor, while affording ample accommodation for vessels bringing in supplies for the garrison, was inaccessible to those of a larger class, and was thus tolerably protected from the attack of a hostile fleet; while landward the estuaries and marshes defended it from the Indians. A still more favorable feature in the location of Menendez's garrison was its great healthiness. Surrounded by salt marshes, free from miasmatic exhalations, the pure and balmy sea-air preserved the colonists from those fevers so fatal to the first settlers on our Southern coasts.

In 1586, Sir Francis Drake, the famous English fillibuster, returning from an expedition against the Spanish West Indies, appeared off St. Augustine, and so terrified the Spaniards that they abandoned the fort and the town to him without any attempt at resistance, and fled to the shelter of the forts on the St. John's. Drake took possession, and pillaged and burnt the town, carrying away considerable booty. The principal public buildings of the place at that time were a court-house, a church, and a monastery. After the departure of Drake, the Spaniards returned and rebuilt the town, which, however, grew so slowly that in 1647 there were within its walls only three hundred families, or fifteen hundred inhabitants, including fifty monks of the order of St. Francis.

In 1665, a party of English buccaneers, commanded by Captain John Davis, made a descent upon St. Augustine with seven small vessels, and pillaged the town. The garrison, though consisting of two hundred men, do not appear to have resisted the attack, which, it is probable, was made from the south by boats.

In 1702, Spain and England being at war, an expedition against St. Augustine was organized in South Carolina, by Governor Moore, of that colony. It consisted of six

hundred whites, and as many Indian allies, and its plan of operations comprised a march by land of one portion of the force, and an attack by sea of the other. The land force was commanded by Colonel Daniel, the naval force by Governor Moore himself. The forces under Colonel Daniel reached St. Augustine before the naval part of the expedition appeared, and easily captured the town, the governor, Don Joseph Cuniga, and the inhabitants, taking refuge in the castle, which was well supplied with provisions, and contained a considerable garrison. Governor Moore, with the fleet, soon after arrived and invested the fortifications, but, not having siege-guns of sufficient calibre,

St. Francis Street, St. Augustine.

could make no impression on the walls of the fort. Colonel Daniel was sent to Jamaica to procure heavier guns. While he was yet absent, two Spanish vessels appeared off the harbor. Governor Moore, fearing that he was about to be attacked by a superior force and his retreat cut off, hastily raised the siege, destroying such of his munitions as he could not remove, and barbarously burning the town. He retreated by land, abandoning his vessels from fear of the Spanish squadron, whose appearance had alarmed him. Shortly afterward, Colonel Daniel returned from Jamaica with mortars and heavy guns, but found Moore gone, and was himself nearly captured. The expedition returned to Carolina in disgrace, but without the loss of a man. It cost the colony of

South Carolina six thousand pounds, and led to the issue of the first paper money ever circulated in America.

In 1727, Colonel Palmer, an energetic officer, made a raid into Florida with about three hundred Carolina militia, and carried destruction by fire and sword to the very gates of St. Augustine, which, however, he dared not attack, though he sacked a Yemassee village about a mile north of the city.

In 1740, war again existing between Spain and England, an expedition against St. Augustine was organized by the famous General Oglethorpe, then Governor of Georgia. He obtained assistance from South Carolina, and from England a naval force of six ships. About the first of June his forces reached

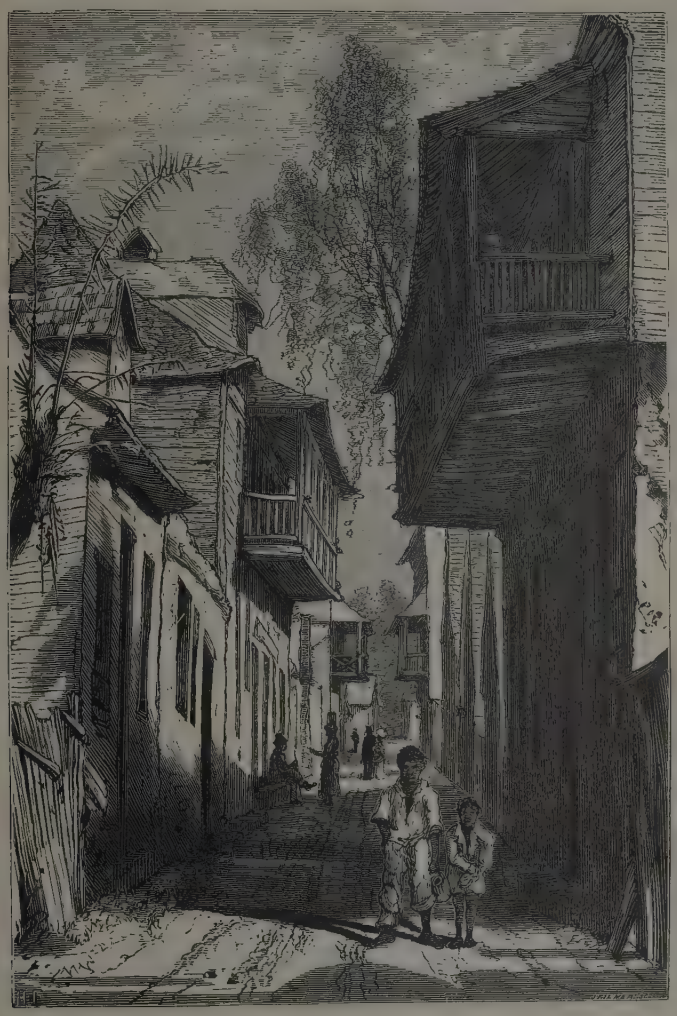
St. Augustine Cathedral.

The Convent-Gate.

St. Augustine, which was defended by a not very numerous garrison commanded by Don Manuel de Monteano, the Governor of Florida, a man of energy and resolution. After a siege of five or six weeks, carried on chiefly by bombardment from Anastasia Island, Oglethorpe became satisfied that he could not take the place, especially as his fleet had withdrawn in apprehension of bad weather, and he accordingly embarked his troops and sailed away on July 9th.

Two years later, the Spanish Governor of Florida, the energetic Monteano, having received reënforcements from Cuba, sailed from St. Augustine with thirty-six vessels and three thousand men to

attack the English settlements in Georgia. He met with some success at first, but was finally baffled, partly by the force and partly by the *finesse* of Oglethorpe, and returned to Florida. In the following year, 1743, Oglethorpe made a raid into the Spanish dominions to the gates of St. Augustine, advancing with such celerity and secrecy that



A Street in St. Augustine.

the Indians attached to his force captured and scalped forty of the Spanish troops under the very walls of Fort St. Mark's, the chief defence of the city.

By the Treaty of 1763, which established peace between Spain and England, Florida was ceded to the English in exchange for Havana, which had been taken by an English fleet during the war. This cession was very distasteful to the Floridians, and nearly all of them removed at once to Mexico and the West Indies. To offset this depopulation, great efforts were made in England to promote emigration to the newly-acquired terri-

tory, the fertility and salubrity of which were highly lauded in pamphlets, books, and newspaper articles. An association was formed in London, at the head of which was Dr. Andrew Turnbull, a Scotch gentleman, having in view the settlement of the large and very valuable body of land lying near Mosquito Inlet. They proposed to accomplish this purpose by procuring settlers from the south of Europe and the Mediterranean islands, especially from Minorca, who, living in a similar climate, might successfully transplant and cultivate the productions of that region on the rich lands of Florida. Accordingly, in 1767, fifteen hundred Greeks, Italians, and Minorcans, were brought over and settled at New Smyrna, on the Mosquito Inlet, ninety miles south of St. Augustine. There they remained till 1776, when their number was reduced by sickness to about six hundred, and this remnant, complaining of ill-usage on the part of the proprietors of the colony, abandoned New Smyrna in a body and made their way to St. Augustine, where lots were assigned to them in the northern part of the city, where their descendants still reside, and constitute an important and very interesting part of the population.

The British kept possession of Florida about twenty years, and then, in 1783, receded it to Spain in exchange for the Bahama Islands. St. Augustine, at that time, contained three thousand inhabitants, a description of which we copy from a "History of Florida," by Mr. Geo. R. Fairbanks—the latest and the best work on this section of our country:

"All the gardens in the town were well stocked with fruit-trees, such as figs, guavas, plantains, pomegranates, lemons, limes, citrons, shaddocks, bergamot, China and Seville oranges. The city was three-quarters of a mile in length, and about a quarter of a mile in width. It had four churches, ornamentally built of stone (coquina?) in the Spanish style. One was pulled down during the English occupation, the steeple of which was preserved as an ornament to the town. One of the churches was attached to the Convent of St. Francis. Their houses were all built of stone, their entrances shaded by piazzas supported by Tuscan pillars or pilasters. Upon the east the windows projected eighteen inches into the street, and were very wide and proportionably high. On the west side the windows were commonly very small, and there was no opening of any kind to the north, upon which side they had double walls, six or eight feet asunder, forming a kind of hall for cellars and pantries. Before most of the entrances, which were from an inner court, were arbors of vines, producing fine and luscious grapes. None of the houses were supplied with chimneys or fireplaces. For the purposes of warmth, stone urns were filled with coals, and placed in the rooms in the afternoon to moderate the temperature in weather sufficiently cool to require it. The governor's residence had piazzas on both sides, also a belvedere and grand portico, decorated with Doric pillars and entablatures. At the north end of the town was the castle, a casemated fort, with four bastions, a ravelin counterscarp, and a glacis, built with quarried stone, and constructed according to

SCENE IN ST. AUGUSTINE.—THE DATE PALM.

the system of Vauban. Half a mile to the north was a line, with a broad ditch and bastions running from the Sebastian Creek to St. Mark's River; a mile from that was another fortified line, with some redoubts, forming a second line of communication between a staccata fort upon St. Sebastian River, and Fort Moosa, upon the St. Mark's River. Within the first line, near the town, was a small settlement of Germans, who had a church of their own. Upon the St. Mark's River, within the second line, was also an Indian town, with a stone church built by the Indians themselves, and in very good taste. These lines may be still distinctly traced. The churches spoken of, outside

The City Gate.

the city, as well as Forts Moosa and Staccata, have long since disappeared, but their sites are known.

"During the English occupation, large buildings were erected for barracks, of sufficient extent to quarter five regiments of troops. The brick of which they were built was brought from New York, although the island opposite the city afforded a much better building-material in the coquina stone. The lower story only of the British barracks was built of brick, the upper story being of wood. These barracks stood at the southern extremity of the town, to the south of the present barracks, and the length and great extent of the buildings fronting on the bay added greatly to the appearance

of the city as viewed from the harbor. The city, in English times, contained many gentlemen of distinction, among whom were Sir Charles Burdett, Chief-Justice Drayton, Rev. John Forbes, the Admiralty Judge, General James Grant, Lieutenant-Governor Moultrie, William Stark, Esq., the historian, Rev. N. Frazer, Dr. Andrew Turnbull, Bernard Romans, Esq., civil-engineer, James Moultrie, Esq., and William Bartram, the naturalist.

"Some few English families remained after the evacuation by the British in 1784, and the entire settlement of Greeks and Minorcans, who had come up from Mosquito from Dr. Turnbull's colony. As they were all Roman Catholics, and were accustomed to a language resembling the Spanish, they were not affected to any great degree by the change of rulers.

"It is a sad thing for an entire people to be forced to give up their homes and seek an asylum in some foreign land; and melancholy was the spectacle presented on all the routes leading to the harbor designated for the embarkation of the English inhabitants of Florida—families separating perhaps forever, long adieus between neighbors and friends who had together shared the privations and pleasures of the past, leaving behind them places endeared by the most sacred associations, and containing, perchance, the precious dust of the departed. Homes embowered among the orange-groves, and made pleasant by the fragrant blossoms of the honeysuckle, the rose, and the acacia; a land where Nature had lavished her choicest beauties, and created a perpetual summer—such was the land upon which the unfortunate residents of Florida were obliged to turn their backs forever."

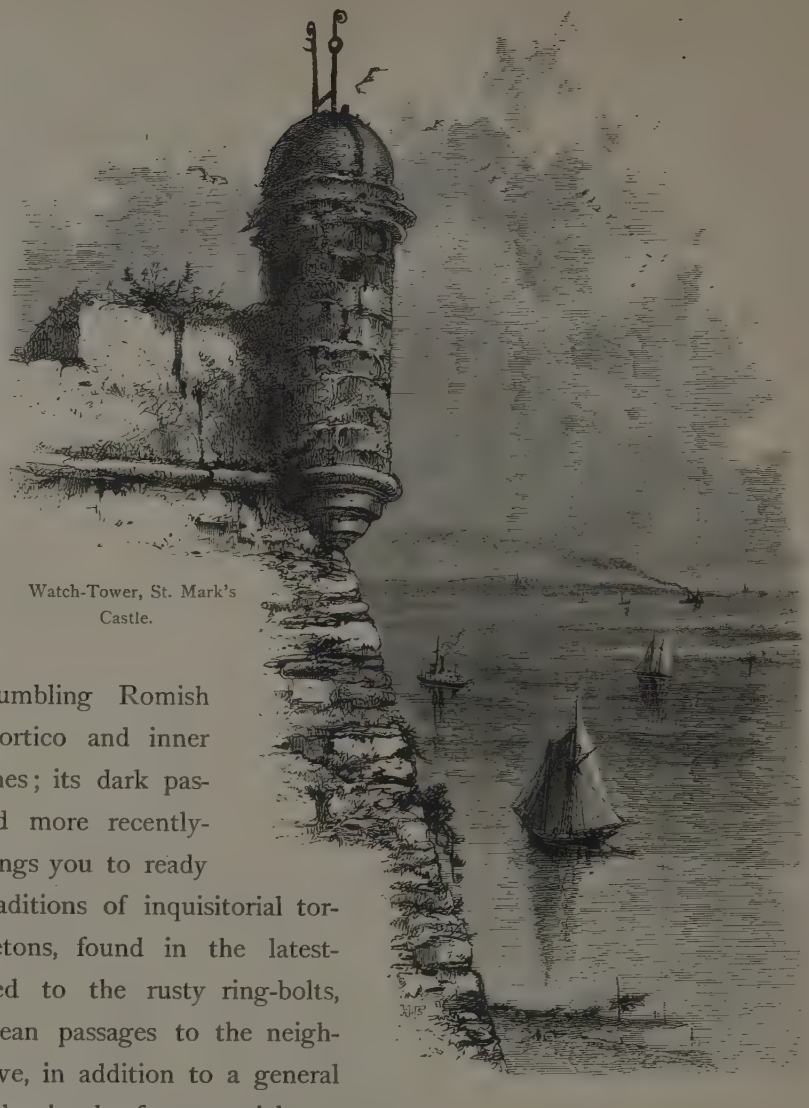
In 1821 Florida passed by treaty from the dominion of Spain to that of the United States, and since then there is little in the history of St. Augustine that demands particular notice.

The most conspicuous feature in the town is the old fort of St. Mark's, or San Marco, which is built of coquina, a unique conglomerate of fine shells and sand, found in large quantities on Anastasia Island, at the entrance of the harbor, and quarried with great ease, though it becomes hard by exposure to the air. It is quarried in large blocks, and forms a wall well calculated to resist cannon-shot, because it does not splinter when struck.

The fort stands on the sea-front at one end of the town. It was a hundred years in building, and was completed in 1756, as is attested by the following inscription, which may still be seen over the gateway, together with the arms of Spain, handsomely carved in stone: "Don Fernando being King of Spain, and the Field-Marshal Don Alonzo Fernando Herida being governor and captain-general of this place, St. Augustine of Florida and its provinces, this fort was finished in the year 1756. The works were directed by the Captain-Engineer Don Pedro de Brazos y Gareny."

While owned by the British, this was said to be the prettiest fort in the king's dominions. Its castellated battlements; its formidable bastions, with their frowning guns

its lofty and imposing sally-port, surrounded by the royal Spanish arms; its portcullis, moat, draw-bridge; its circular and ornate sentry-boxes at each principal parapet-angle; its commanding lookout tower; and its stained and moss-grown massive walls—impress the external observer as a relic of the distant past: while a ramble through its heavy casemates—its crumbling Romish chapel, with elaborate portico and inner altar and holy-water niches; its dark passages, gloomy vaults, and more recently-discovered dungeons—brings you to ready credence of its many traditions of inquisitorial tortures; of decaying skeletons, found in the latest-opened chambers, chained to the rusty ring-bolts, and of alleged subterranean passages to the neighboring convent. We give, in addition to a general view of this fort, at the head of our article, an illustration of the quaint old watch-tower, overlooking the sea, and a glimpse of the interior, showing a stairway crumbled away out of almost all resemblance to its original form, and beneath an elliptical arch the entrance to the dungeons we have referred to. Here only a few years since, in a cavity revealed by the sinking of the parapet above, were found two skeletons hermetically walled in. The traveller curious in these old fortifications will be disposed to visit the ruins of a fort about twenty miles south of St. Augustine, on Matanzas Inlet. Of the history of this structure nothing is known. It is entirely different in form of construction from St. Mark's, and was probably erected about the same time.



Watch-Tower, St. Mark's Castle.

Several other buildings in the town are worthy of notice for their quaintness or antiquity. The cathedral is unique, with its belfry in the form of a section of a bell-shaped pyramid, its chime of four bells in separate niches, and its clock, together form-

ing a cross. The oldest of these bells is marked 1682. The old Convent of St. Mary's is a suggestive relic of the days of papal rule. The new convent is a tasteful building of the ancient coquina. The United-States barracks, recently remodelled and improved, are said to have been built as a convent, or monastery. The old government-house, or palace, is now in use as the post-office and United-States court-rooms. At its rear is a well-preserved relic of what seems to have been a fortification to protect the town from an over-the-river or inland attack. An older house than this, formerly occupied by the attorney-general, was pulled down a few years ago. Its ruins are still a curiosity, and are called (though incorrectly) the governor's house.

Interior of St. Mark's Castle.

The "Plaza de la Constitucion" is a fine public square in the centre of the town, on which stand the ancient markets, and which is faced by the cathedral, the old palace, the convent, a modern Episcopal church, and other fine structures. In the centre of the plaza stands a monument erected in honor of the Spanish Liberal Constitution.

The old Huguenot burying-ground is a spot of much interest; so is the military burying-ground, where rest the remains of those who fell near here during the prolonged Seminole War. Under three pyramids of coquina, stuccoed and whitened, are the ashes of Major Dade and one hundred and seven men of his command, who were massacred by Osceola and his band. A fine sea-wall of nearly a mile in length, built of coquina,

with a coping of granite, protects the entire ocean-front of the city, and furnishes a delightful promenade of a moonlight evening. In full view of this is the old light-house on Anastasia Island, built more than a century ago, and now surmounted with a fine revolving lantern.

The appearance of St. Augustine to the visitor from other parts of the country is as quaint and peculiar as its history is bloody and varied. Nothing at all like it is to be seen in any part of the United States. It resembles some of the old towns of Spain and Italy. The streets are quite narrow; one, which is nearly a mile long, being but fifteen feet wide, and that on which a principal hotel stands being but twelve feet, while

Ruins of a Spanish Fort at Matanzas Inlet.

the widest of all is but twenty-five feet. An advantage of these narrow streets in this warm climate is that they give shade, and increase the draught of air through them as through a flue. Indeed, some of the streets seem almost like a flue rather than an open way; for many of the houses, with high roof and dormer-windows, have hanging balconies along their second story, which seem almost to touch each other over the narrow street; and the families sitting in these of a warm evening can chat confidentially, or even shake hands with their over-the-way neighbors.

The street-walls of the houses are frequently extended in front of the side-garden—the house-roof, and perhaps a side-balcony, covering this extension—or the houses are

built around uncovered courts, so that, passing through the main door of a building, you find yourself still in the open air, instead of within the dwelling. These high and solid garden-walls are quite common along the principal streets; and an occasional latticed door gives you a peep into the attractive area beyond the massive structure, with perhaps a show of huge stone arches, or of a winding staircase between heavy stone columns, or of a profusion of tropical vegetation in the winter-garden, bringing to mind the stories in poem and romance of the loves of Spanish damsels, and of stolen interviews at the garden-gate, or elopements by means of the false key or the bribed porter. The

Coquina Quarry, Anastasia Island.

principal streets were formerly well paved or floored with shell-concrete, portions of which are still to be seen above the shifting sand; and this flooring was so carefully swept that the dark-eyed maidens of Old Castile, who then led in society here, could pass and repass without soiling their satin slippers. No rumbling wheels were permitted to crush the firm road-bed, or to whirl the dust into the airy verandas, where in undisturbed repose sat the Spanish dons and dames.

There are two convents in St. Augustine, whose nuns are mainly occupied in the education of young girls. There are among them a number of nuns brought over from France a few years since, who teach, besides their own language, the art of making lace,

A GARDEN IN FLORIDA.

and have also introduced the manufacture of hats from the palmetto and from the wire-grass, which is very strong and durable.

It must not be supposed, however, that St. Augustine is built wholly of coquina and in the Spanish style. There are many fine residences there in the American style. A profusion of tropical plants, and shrubs, and trees, ornament their grounds. Here the orange flourishes, and is abundant and delicious; several fine groves invite the visitor's inspection. The fig, and date, and palm, and banana, are all seen here, as also the lime and lemon, which grow to a great size, and the sweet and the wild olive; the citron, the guava, and the pomegranate, are all indigenous. The grape, and the peach, and the water-melon, also grow here with great luxuriance.

Among our illustrations the reader will find a garden-scene (see page 189), which, eminently characteristic of St. Augustine in many of its features, is specially noticeable on account of a splendid specimen of a date-palm, flanked on one side by a fig and on the other by a lemon tree. To Northern eyes the picture is rendered amusing by the Liliputian proportions of a Florida hay-stack, which, being too weak to stand alone, is wound around a stout bludgeon. The peculiarity of the trunk of the palm is, that it has the same diameter at the top as it has at the base. Its long shaft is ornamented with a capital about six feet high, clothed with branches some fifteen feet long, the leaves of which are arranged like the feather part of a quill. These palms, so essentially tropical in their character and appearance, vary from the vegetation of northern climates in every intrinsic quality as well as shape. The heart of the palm is pith; the heart of the northern tree is its most solid part. The age of the palm is legibly written upon its exterior surface; the age of the northern tree is concealed under a protecting bark. The northern tree, though native of a cold, inhospitable climate, is adapted to give shade; the palm, with its straight, unadorned trunk and meagre tuft of leafy limbs, gives no protection to the earth or to man from the burning tropical sun.

In "A Florida Garden" we have, with surroundings of a more refined character, other specimens of Southern vegetation. The cactus on the right of the picture is an exceptional development of this singular plant, which is usually a humble occupier of the soil. Its habit is to push a few leaves upward, and then shed them one after another, something after the fashion crabs dispose of an offending claw. Each discarded leaf, however, sets up growing for itself, and thus the cactus, in a modest way, usurps large tracts of favorable soil, forming an undergrowth more impenetrable to man and beast than walls of wood or iron. But our cactus in the garden has been led by the skilful hand of the cultivator upward, and, by removing every exuberant bud, developed into proportions quite foreign to its customary experience. At the left of the picture we have, in the banana, another phase of tropical horticulture, with its broad leaves, that unfold in a single night from a long, slender stem, and its pendent clusters of fruit.

CHARLESTON AND ITS SUBURBS.

WITH ILLUSTRATIONS BY HARRY FENN.

A Garden in Charleston.

IF one go to Charleston from the North, let him go in the spring-time. The almost sudden change from wintry landscape and bleak winds to summer suns and summer foliage is a delightful surprise. If it chance with the traveller, as it chanced with Mr. Fenn and the writer, that the steamer sail away from the New-York wharf amid the rain and wind of a Northern March, that all the way southward cloud and storm surround and beset the vessel, and then at once come with the longed-for sun the wished-

for harbor, the sudden sweetness and beauty of the scene will seem to him a transition to a terrestrial paradise.

Because Charleston lies low, and seems to rise up out of the waters as one sails up to it, it has been called the American Venice. It may be doubted if one would think of this comparison if the guide-books did not suggest it. There are charms enough in the American city to please even an experienced traveller, but one would scarcely find his appreciation of them enhanced by recalling the wonders of the Bride of the Adriatic. If in no true sense a Venice, Charleston yet rises with charming effect from the sea. The long, palm-studded shores of the bay, the islands and forts that dot its surface, the mansions that front the waters, and the spires that lift to the skies, all make up a very pretty picture.

The first impression the streets of Charleston give is that of retiring respectability. There are no splendid avenues, no imposing public structures; but a few fine old churches, and many noble private mansions standing in a sort of dingy stateliness amid their embowering magnolias, command your attention. Our New-York custom, derived from our Dutch ancestors, of painting our brick fronts, is not in vogue here, where the houses have the sombre but rich toning that age alone can give when its slow pencillings are never disturbed by the rude intrusion of the painter's brush. The Charleston mansions are nearly always built with gable-end to the street. At one side rises a tier of open verandas, into the lower of which the main entrance to the building is placed. Usually, after the English fashion, a high brick wall encloses the grounds of the house, and it is only through an open gate-way that one catches a glimpse of flowers, and shrubs, and vines, that bloom and expand within the enclosure. But the rich dark green of the magnolia half screens the unsmoothed brick walls far above, and seems to hold the ancient structure in the hush of venerable repose.

It is quite possible the somewhat rude surface and antique color of the brick houses in Charleston would fail to please the taste of Northerners reared amid the supreme newness of our always reconstructing cities. But every one ought to travel in the company of an artist. It is only when associated with one of this instructed class that a man discovers the use of his eyes, and begins to understand fully the beauties, and harmonies, and rich effects that pertain to many things neglected by ordinary observers. These time-tinted mansions of Charleston, to the eye of an artist, have many charms. In the writer's own case he found it a good training to hear enthusiastic Mr. Fenn dilate upon this bit of color, that glimpse of rich toning, this new and surprising effect. It was even a revelation sometimes to see him extract a picture out of apparently the most unfavorable material. Nothing, indeed, seemed foreign to him but the merely pretty. Sweet, new houses of a respectable primness have no attraction for his artistic longings. Fresh paint is his abomination. The glare of the new enters like iron into his soul. But a fine bit of dilapidation, a ruin with a vine clambering over it, a hut all

Charleston, from the Bay.

awry, with a group of negroes in their flaring turbans set against the gaping walls, old chimneys and old roofs, the dark grays and browns that form into such rich pictures in an old town, these things would be sure to catch his eye and delight his fancy. In these semi-tropical places there are a hundred bits that would be admirable for a sketch in oil or water colors, that would lose their value in black and white. It is a pity that divine color cannot enter into engraving.

The search for the picturesque that would meet the necessities of our purpose was not expeditious. It is only after walking around a place, and surveying it from different situations, that an artist can settle upon his point of view. We were three days in Charleston ere Mr. Fenn discovered the prospect from St. Michael's belfry, and to this the reader's attention is solicited. If he does not think it very good, we shall be tempted to denounce his artistic appreciation. Note the far stretch of sea and the long, low shores; there is Fort Sumter far down the bay, and nearer the famous Castle Pinckney, a fortress that stands guard in the direct approach to the town. The por-

A GLIMPSE OF CHARLESTON AND BAY, FROM ST. MICHAEL'S CHURCH.

tion of the city which this view commands is its most ancient quarter. Many of the buildings were erected in colonial times, and up to the period of the Revolution this comprised nearly the entire city. The chimneys are of a quaint fashion, and the roofs are mostly of grooved red tiles. The wide street to the left of the picture is the Charleston Wall Street, where congregate all the banks and banking-houses, brokers' offices, and law-offices. Here assemble the merchants and brokers; here are effected those transactions in commerce and finance so dear to the heart of the money-making world. The building at the foot of the street is the ancient custom-house, which, during the recent war, was rudely hustled by many an irreverent shell, unceremoniously battered by ball and petard, and now stands a broken and shattered reminiscence of by-gone belligerency. This structure, which dates back before the independence of the colony, is dear to the Charlestonians. It has always excited their patriotic sympathies, for here during the Revolution the patriot prisoners were confined, and from its portals the heroic martyr Hayne was led to execution.

The old buildings that the church looks down upon are not more ancient than the church itself. St. Michael's was built in 1752—it is said from designs by a pupil of Sir Christopher Wren. The tower is considered very fine, and the situation of the church makes the spire a conspicuous object far out at sea. During the siege of Charleston in the late war, it was a mark for the Federal artillerymen; but, though persistently shelled, it was struck but a few times, and then only with slight injury.

Another of the ancient churches in Charleston is St. Philip's. This was the first church establishment in Charleston; but the present structure, which is the third erected by the parish, although of venerable age, is yet not quite so old as St. Michael's. The view from the spire is fine; but there is a keener interest in the graveyard than even in the old church itself, for here are met with at every turn those family names that have so long been associated in honor, not only with Charleston, but with the whole country —Gadsden, Rutledge, and Pinckney. In the portion of the graveyard that lies across the roadway is the tomb of Calhoun. It consists of a plain granite slab, supported by walls of brick, and for inscription has simply the name of "CALHOUN." The remains of the statesman were removed during the war, when Charleston was threatened with capture, under a most misjudged apprehension that the Union soldiers would disturb them. They were replaced in the spring of 1871. St. Philip's, with its embowering trees, its ancient gravestones, its scarred and broken walls, its marks of hostile shells, its surroundings of old buildings, the tiled roofs of which show quaintly through the green of the trees, affords a picture that is picturesque and pleasing.

Charleston has been accused of not having a public park; but the promenade known as the Battery is an enclosure which, if small, has some advantages that very few parks can supply. Like the New-York Battery, it is on the water's edge; it commands a view of the extensive bay, and is fanned by winds that come laden with the salt

odors of the ocean. It is surrounded by fine private mansions, and at early morning, at twilight, or on moonlit nights, is thronged with people seeking rest and recreation.

After one, in Charleston, has promenaded on the Battery; has visited the churches; has seen all the ruins effected by war and by fire; has examined the handsome new custom-house, now erecting; has admired all the stately old residences; has visited the fine

A Road-side Scene near Charleston.

military academy; has watched the various aspects of negro character, which in these Southern cities is an endless source of amusement—he must sail down the bay, and he must visit the rich lowland scenery of the suburbs.

Down the bay are many points of historic interest; but Fort Sumter crowns them all. On Sullivan's Island, at the sea-line, is the famous Fort Moultrie of Revolutionary fame. Here, before the war, was the Moultrie House, a watering-place resort for the

Charlestonians. On another island is, or was, the Mount Pleasant Hotel, where there is good bathing, and also forests that afford fine drives and pleasant rambles. Our own expedition down the bay terminated at Fort Sumter. To this place there is a daily ferry, consisting of a capacious yacht, the commander of which is an Athenian Greek. There was to our minds something of the Mediterranean in the whole aspect of the vessel, crew, and passengers, which a lateen-sail would have rendered complete. The passengers, that came in little groups to the vessel, were motley and picturesque: the buxom and turbaned negro "aunties," the solemn but ragged negro "uncles," the gay and chattering negro young folk, the varied complexions and costumes of poor whites and rich whites—these elements seemed well fitted for the presiding genius of a mariner from the Archipelago.

Ashley River.

The wind was brisk, and so we ran down to the fort swiftly. Sumter is a ruin, as all the world knows; but possibly all the world does not know that on the highest point of its walls a light-house has been erected, thus utilizing the historic ground. One experiences something of a sensation, as he picks his way over the broken bricks and stones of this fort, and, if alone, would be apt to drift away into far reaches of meditation. On the piled-up rocks without the walls, amid the *débris* of masonry, surrounded by remains of cannon, shell, and round shot, we picnicked—a party, one moiety of which represented those who assailed, and the other moiety those who defended, the walls.

After clambering over the ruins, penetrating the dark underground passages, visiting the casemates that still remain, we returned, a high wind giving animation and expedition to the sail.

Perhaps the greatest charm to the Charleston visitor is the lowland scenery of its suburbs. The city is situated at the confluence of the Ashley and Cooper Rivers, and the banks of these streams have all the characteristics of Southern landscapes. Oaks, magnolias, myrtles, and jasmines, give splendor and profusion to the picture, while rice-fields and cotton-fields vary and enrich the scene. Here once resided,

during a part of the year, a wealthy aristocracy; but, alas! nearly every mansion is in ruins. The destructive arm of War fell upon this paradise with all its force, nearly every one of the fine old houses having been fired (so it is here reported) by Federal soldiers.

Our expedition to the Ashley we shall long remember. It was by the invitation of Charleston friends, whose hospitality justified the social reputation of the city. The political elements composing the party were as antagonistic as possible; but, regardless of North or South, the Ku-klux, or the fifteenth amendment, we gathered in peace. There were in our small company a Northerner, who had fought under the Union flag, a descendant of one of the proudest names of Revolutionary fame; a Virginian, also of a

A Live-Oak on the Ashley.

family of renown, whose love of daring and danger had led him into many a strange adventure under Mosby; an Englishman, whose enthusiasm for the Confederate cause had brought him all the way from London to do battle under Lee; another Englishman, whose sympathies for the Federal cause had been marked all during the war; a son of a distinguished journalist of New York, whose name has been notably identified with the Republican party; and, lastly, the writer, of whose political complexion it is not necessary to speak. But, in the face of all these elements of difference, the company was supremely harmonious; and the day, in the estimation of at least some of us, must be marked with a white stone.

The main road from Charleston into the country has been frequently highly praised, and, although some of the fine trees that bordered it have been destroyed, it is still an avenue of singular beauty. The road emerges from Charleston almost immediately into a green wilderness, and for a long distance it is canopied by the boughs of pines, and oaks, and magnolias, with rich effect. There are no signs along the road, as would be the case in our Northern section, of the proximity of a great city. No houses or villas line the way; you seem a hundred miles from a town. You meet occasionally a queer, slight cart, drawn by an ox or a donkey; you pass a group of sportsmen; you encounter now and then on the road-side a group of negroes. An illustration, by Mr. Fenn, catches the spirit of the scene with great fidelity. The extemporized covering of boughs shelters a "sweet-'tater" woman, one who dispenses to hungry wayfarers of African hue the edible baked potato of the South.

We reached Ashley River by a sort of by-road. Here a bridge once spanned the stream, but it was destroyed during the war, and now there is a boat propelled by the lusty arms of negro ferrymen. A rope would aid the passage greatly; but our Southern Africans take usually the most troublesome means possible to accomplish their ends. They are proficient in the art of how not to do a thing. When we reached the bank, the boat was on the opposite shore. The current was swift; it took fully half an hour to get the boat over to us, and then the vessel could only accommodate one of our two vehicles. We were nearly two hours getting our forces to the opposite side of the stream.

Once on the opposite side, we were driven through a striking scene—a narrow road winding through a superb Southern forest, where the mammoth live-oak, and the tall pine, and the princely magnolia (*Magnolia grandiflora*) unite to form vistas of rare beauty.

The live-oak of the Southern lowlands is the most picturesque of trees. The famous California trees are of interest solely on account of their magnitude. Their gigantic proportions impose upon the imagination, it is true; but they lack altogether the quaint, fantastic, and picturesque form of the live-oak. An artist could make a series of studies of these trees in which every one would be essentially peculiar in form. In the illustration of the banks of the Ashley, Mr. Fenn has shown two of these trees, comparatively small in size, whose trunks stretch out for a distance almost horizontally; elsewhere the reader will find an illustration of a monstrous trunk standing near the Ashley, which in diameter almost rivals the "big trees" of the Pacific, and which in form has far more novelty and beauty. We saw one of these trees, of magnificent proportions and nearly symmetrical in form. We lifted the low branches, that nearly swept the ground, and entered what seemed a vast forest cathedral. The quaint trunk was covered with knobbed protuberances, and scarred and seamed as if with the marks of many centuries. Its branches, mammoth trees of themselves, shot out at a low elevation

"Magnolia."

in a nearly horizontal line, extending probably a hundred feet, dipping at their extremities to the ground. The pendent moss from every bough hung in long, sweeping lines, and the sun flickered through the upper branches, touching up moss, bough, and trunk, and relieving the gloom of the interior with bright flashes of light. We were shown an avenue of live-oaks, standing in the very heart of the forest, that would make a superb approach to the finest palace in Europe. But, alas! here it leads only to a ruined waste. A romantic story is connected with this avenue, which some poet should put in verse. The young owner of the estate—this was many years ago—had brought a fair bride from foreign lands. A bridal cavalcade swept out of Charleston to escort groom and bride to the manorial mansion on the Ashley. The proud and eager groom, anxious to show his young wife the charms of her new home, urged her steed ahead of the rest, and, when they reached the avenue of oaks, called upon her to look and admire. Almost as they spoke, a cloud of smoke appeared at the other end of the avenue, and instantly flames

of fire shot up among the tree-tops. The old manor was in a blaze, and the bride arrived only in time to see the destruction of her promised paradise. The young husband was so cast down by this calamity that he carried his wife abroad, and never returned to his American estate. Trees and bushes have grown up around the old oaks, but the avenue retains all its distinct majesty amid the encroaching growths of the forest.

Of all the planters' houses that stood along the Ashley, but one remains, and this is abandoned. "Drayton Hall" is a large brick mansion, standing in the centre of grounds of a park-like character. The rooms are wainscoted from floor to ceiling, the fireplaces are lined with old-fashioned colored tiles, and the mantels are richly carved, but the building was never entirely finished. The story goes that it was erected in exact copy of an English mansion, in order to gratify the taste of the lady to whom the owner was betrothed. The wainscot, the tiles, the carved mantels, and marble columns, were all imported from England; but, ere the chivalrous lover had reproduced on the Ashley a full copy of the house which had charmed his betrothed on the Thames, the lady died; and, since then, the unfinished manor, like a broken monumental column, stands in its incompleteness a memorial of his loss.

Our destination was the estate known by the name of "Magnolia," on the grounds of which we were to lunch. This place is almost a paradise, but a paradise in ruins. The abundance of magnolias gives it its name, but these are interspersed with immense oaks, and, at the time we were there, under the trees a splendid display of oleanders and azaleas filled the spaces with an array of color such as we had never seen approached. These low-country plantations were not usually occupied by their owners in midsummer; then fevers, heat, and insects, made them far from safe or agreeable, and so the white members of the family went into town or northward to upland habitations. This accounts for the special culture of spring blossoms which we noticed at "Magnolia." The planter had given devoted attention to azaleas, grouping the different shades of color from white to deep scarlet in delicate contrasts; and this flower, blooming on bushes from three to a dozen feet in height, lined all the winding avenues, and flashed under the shadows of the magnolias a tropical splendor of bloom that filled us all with admiration. And all this in the midst of desolation and neglect, with overgrown pathways, unweeded beds, and the blackened walls of the homestead looking down upon the scene! A few negroes were in possession, and one tall, melancholy, gray-haired mulatto, with all the dignity and deportment of the old school, lifted his hat, and said: "Welcome, gentlemen, to Magnolia!" On the border of a small lake within the grounds, shadowed by the moss-hung boughs of the oak, we lunched, and then bade adieu to the place. A pathetic story is told of the ruined proprietor, who comes often to his old favorite grounds, and wanders about them with profound melancholy, or sits for hours with his face in his hands, brooding over his desolated home.

The day after our visit to Ashley River we drove to a very old church on Goose Creek, near Cooper River, and about seventeen miles from Charleston. This church was built in 1711. It is situated in the very heart of a forest, is approached by a road scarcely better than a bridle-path, and is entirely isolated from habitations of any sort. A deep ditch surrounds the building, dug as a means of protecting the graves within

St. James's Church, Goose Creek.

it from wild animals. The church was saved from destruction by the Tories during the Revolutionary War on account of the British arms that are emblazoned on the wall just above the pulpit. The interior is very odd. Seventeen square pews fill up the ground-floor, which, like all old English churches, is of stone. A gallery at one end has three or four rows of benches, and under this gallery are a few more benches designed

for the negro servants. The altar, the reading-desk, and the pulpit, are so small, and crowded in a space so narrow, that they seem almost miniatures of those church fixtures. The monumental tablets on the side of the altar are very oddly ornamented in form, and, what is still more singular, are highly emblazoned in color. Although these tablets have been in their places over one hundred and fifty years, the colors retain apparently all their original brilliancy. The lion and the unicorn over the pulpit also preserve their original tints. These specimens of old-time fresco gave us unexpected proof of the duration of this method of color-painting; and the whole chancel in its gay tints and ornamental carving seemed queerly out of place in the otherwise plain and rude structure. This church was once the centre of flourishing settlements, but, with the decadence that has come over the old Commonwealth, the plantations are forsaken, and this historical vestige stands, in the midst of a wilderness, neglected and almost unknown. Trees and bushes have overgrown and hid the gravestones, and the native forest threatens in time to obscure the very foundations of the building.

Magnolia Cemetery is one of the places in Charleston to which strangers are directed. It is a new cemetery, and its name is rather derived from what is expected of it than what it exhibits. So far, very few magnolias adorn it, but there are some live-oaks exceptionally fantastic and queer in form. In this cemetery is a monument to Colonel William Washington, whose exploits in the Revolution are well known; to Hugh Swinton Legaré, one of the ripest scholars South Carolina has produced; and in a vault repose the remains of Commodore Vanderhorst, whose coffin, shrouded with the Union Jack, may be seen through the latticed door of the tomb.

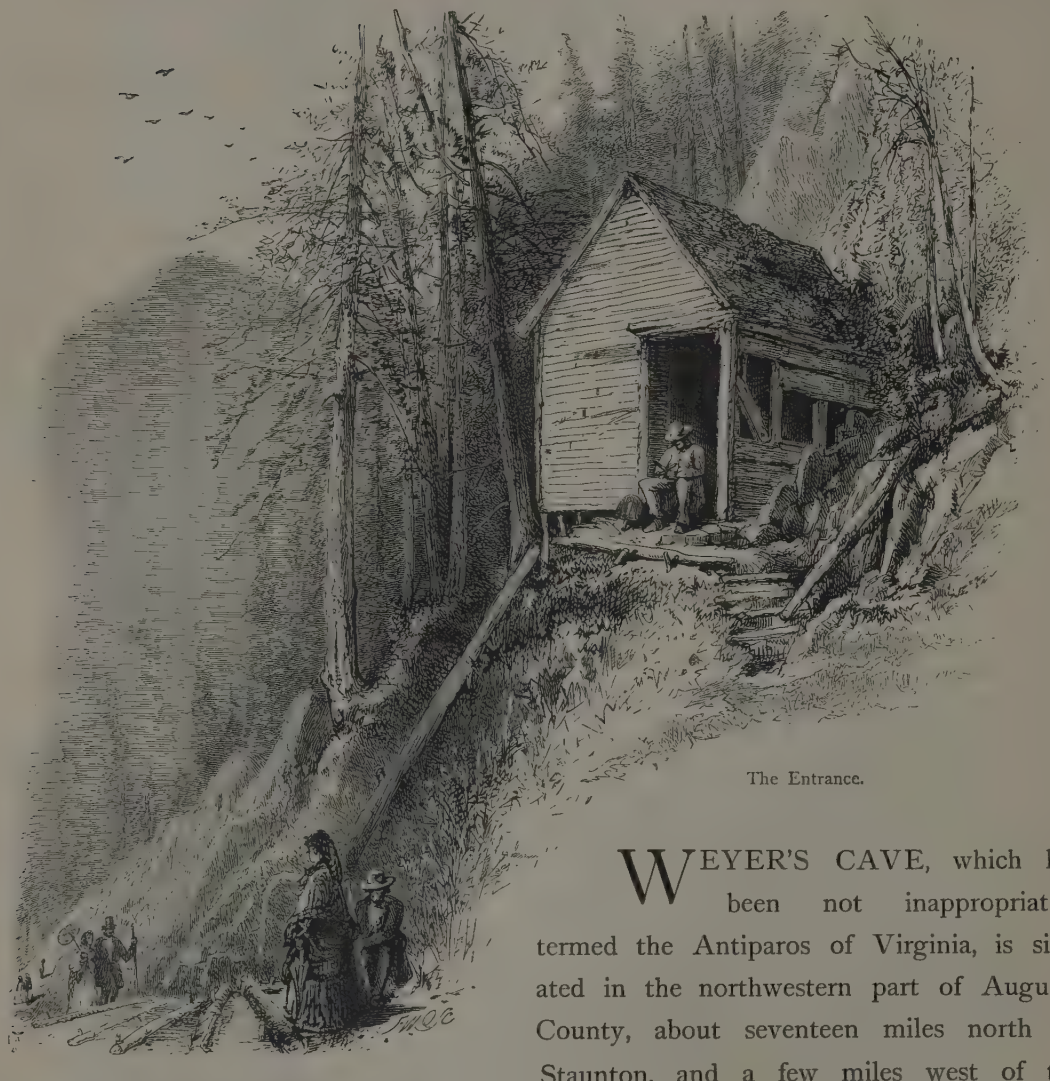
We may here, before closing our article, give a brief glance at the historical record of the city. It was originally settled about 1679—over fifty years before the city of Savannah on the same coast—by an English colony under William Sayle, who became first governor. Its name was obviously given in honor of Charles II., who then was King of England. Its early history was one of conflicts with Indians, devastations by storm and fire, and civil commotions with the lords proprietors, whose authority was eventually deposed in favor of the crown. It was one of the first of the chief places of the South to extend its sympathy to the Northern colonies in their struggle with the mother-country, and led the way in asserting its own independence. Its history during the Revolution was of struggle and misfortune. It was three times assaulted by the enemy: first, in the memorable attack on the palmetto fort at Sullivan's Island, when the British fleet and army were beaten off; next, by the attempted *coup de main* of General Prevost; and, thirdly, by Sir Henry Clinton, when it stood a siege of six weeks, and succumbed at last to famine. Of its strange and often brilliant history since the formation of the Union, of its position as the leader of Southern sentiment and politics, we need not speak; nor is it necessary to recount the severe vicissitudes through which it passed in the late unhappy struggle. We must recall, however, the

days when it was at the height of its glory—when it was the centre of a far-extending circle of brilliant homes, and its old mansions echoed to the tread of famous statesmen and renowned women. We recollect the report of the noted Elkanah Watson, who, just after the Revolution, travelled from Providence to Charleston in a buggy, and whose descriptions of the towns and cities he visited are usually accepted as trustworthy. The wealth and luxury of Charleston surprised the Rhode-Islander, and he speaks of the almost "Asiatic splendor" in which the citizens lived. Charleston was the centre of a somewhat peculiar civilization, and one highly favorable to the cultivation of the few. It was resorted to in summer as a watering-place by the people of the country. The planters brought with them wealth and leisure, and these naturally led to luxurious tastes and habits. We doubt if any community of the same number has produced so many men of distinguished merit. Pinckney, Rutledge, Gadsden, Legaré, are but the leading names of a host of worthies who shed bright lustre on the place. We may hope yet to see the old plantations on the Cooper and the Ashley attain a prosperity under the new dispensation as brilliant as that they enjoyed under the old; we may trust that the old mansions within the city shall renew the social triumphs of their brilliant past; and we may believe that statesmen and men of letters will not fail to perpetuate that renown the famous city once so fairly won and so fully enjoyed.

Magnolia Cemetery

WEYER'S CAVE, VIRGINIA.

WITH ILLUSTRATIONS BY HARRY FENN.



The Entrance.

WEYER'S CAVE, which has been not inappropriately termed the Antiparos of Virginia, is situated in the northwestern part of Augusta County, about seventeen miles north of Staunton, and a few miles west of the Blue-Ridge Mountains. It is located in a large hill, or rather a spur of a range of small mountains, branching out southwesterly from this spine of the Atlantic water-shed, and for many miles overhanging its uppermost tributaries.

This cavern derives its name from one Bernard Weyer, a dweller in the neighborhood, who discovered it while hunting an opossum, ferreting out the little animal to its retreat within the mouth. It is approached from the rustic inn, half a mile distant, by a broad carriage-road to the foot of the hill, and thence by a zigzag, precipitous foot-path to the opening near the crest of the summit.

The entrance, when discovered, was scarcely large enough for Mr. Weyer to enter on his hands and knees; and his astonishment and terror may be imagined when on and on he groped in the darkness, without finding the cunning little quadruped which had secured such commodious and gorgeous quarters. Since then the entrance has been enlarged, so as to be about seven feet in height, and is covered over by a rustic shed, to which is affixed a strong wooden gate, secured by a heavy lock.

A chill creeps over one upon entering, and he feels an intensity of awe as he looks forward, beyond the dim, flickering lights in the sconces, to the profound darkness which spreads its impenetrable gloom in the distance. But the guide is master of his business; he is cheerful, facetious, loquacious; and, winding a yarn of some adventurous explorer before his visitor (perhaps some illustrious personage—the Duke of Buckingham, who sadly offended a liege lord of America; Frederika Bremer, who, in her geological researches here, was taken by a neighboring husbandman to be an escaped unfortunate from the Staunton Lunatic Asylum), or cracking some wily joke, leads on until dusky, indefinable figures loom up in the midnight, when by a skilful shifting of his lights are discovered all around grim, grotesque stalagmites, and opening out is a long gallery, at the nether end of which a single mute, stark-white figure gives to this apartment its significant title, the Ghost-Chamber.

From this the Hall of Statuary is entered, when imagination readily conjures up the galleries of the Vatican by moonlight, or rather by torchlight. Above, in the ceiling, is a circular opening, about fifteen feet in diameter, fringed around with white, sparkling stalactites. Through this opening is seen the interior of a dome many feet higher, draped and columned as by the deft hand of some fantastic architect. Upon one side of this hall is the similitude of an altar, with curtains and candlesticks on the top; and, on the other, fancy brings out a cathedral-organ, with its rows of pipes and pendent cornices.

A few paces forward, and down a rude flight of some twenty steps, we reach the Cataract, seemingly a water-fall petrified in its leap, affording one of the finest spectacles in the cave. The sullen stillness of this hushed Niagara is very impressive, and instinctively leads the imagination to the roaring and rushing green waters of the true cataract after which it is named.

A little farther on is the Senate-Chamber, with the speaker's chair at one end, in front of which are rude representations of the desks of the honorable members; and above, at one side, is an unmistakable gallery, fenced around by a fanciful balustrade, over which seemingly peer the heads of waiting visitors.

Next in order comes the Cathedral, from the centre of which hangs the fancied resemblance to a chandelier; and beyond it rises the pulpit, an elevated circular desk, covered with the most graceful folds of white drapery. On the opposite side is a baldachin fringed with glittering crystals, the whole ceiling being hung with stalactites,

CLEOPATRA'S NEEDLE AND ANTHONY'S PILLAR.

dropping in long points and broad, wavy sheets, some of milky whiteness, others of a muddy red bordered with white, or with the darker cornelian shades of the Piedmont brown. This apartment has also been vulgarly termed the Tan-Yard, the broad sheets of yellow spar suggesting a striking resemblance to hides hung to dry. These stone draperies are translucent, faintly emitting the rays of light when a candle is held behind them; and also sonorous, yielding soft musical tones, like the gently-touched keys of an organ, on being struck, while all the notes of the gamut may be produced by skilful blows, the side-walls responding to blows of the hand or foot with the echoing notes of "deep-toned bells."

In this vicinity a huge pyramidal heap of cornelian-tinted stalagmite, veined and spotted with white, as is the Swiss stone, sustains on one side a tall, slender, towering column, which has received the name of Cleopatra's Needle; and on the right a more massive and taller shaft, bearing the appellation of Anthony's Pillar, rears its pointed head until it touches the sparkling stalactites that stud the dark ceiling; and all around are formations more or less resembling objects in Nature, or as wild and weird as the most imaginative brain could conjure out for fiction.

From this section of the cavern, a natural stairway, with natural supports on the left hand, is descended, called Jacob's Ladder; and, beyond, a square rock covered with a white incrustation, resembling a table-cloth, is called Jacob's Tea-Table; and near by is an ominous-looking cavity, bearing the name of Jacob's Ice-House, or the Bottomless Pit. Whether bottomless or not, has never yet been fully ascertained; but, it is certain, a torch dropped in seems to twinkle away into infinite nothingness, and a stone let fall returns no sound to the waiting listener.

In this part of Weyer's Cave is what, for want of a more appropriate term, must be called the Geyser, an immense stalagmitic accretion, with streaks and sparkles of white, lighting the waves of the cumuli as the play of sunlight the turbulent volumes of one of Nature's boiling springs.

Farther on is Washington's Hall, otherwise called the Gnome-King's Palace, rising into a vaulted roof, upward of *ninety feet* in height and *two hundred and fifty* in length. An intelligent traveller, who once visited Weyer's Cave at an annual illumination, has thus finely described this magnificent apartment:

"There is a fine sheet of rock-work running up the centre of this room, and giving it the aspect of two separate and noble galleries, till you look above, where you observe the partition rises only about twenty feet toward the roof, and leaves the fine arch expanding over your head. There is a beautiful concretion here, standing out in the room, which certainly has the form and drapery of a gigantic statue. It bears the name of the nation's hero; and the whole place is filled with these projections —appearances which excite the imagination by suggesting resemblances and leaving them unfinished. The general effect, too, was perhaps indescribable. The fine per-

THE GEYSER.

spective of this room, four times the length of an ordinary church; the numerous tapers, when near you so encumbered by deep shadows as to give only a dim, religious light, and, when at a distance, appearing in their various attitudes like twinkling stars on a deep-dark heaven; the amazing vaulted roof spread over you, with its carved and knotted surface, to which the streaming lights below in vain endeavored to convey their radiance; together with the impression that you had made so deep an entrance, and were so entirely cut off from the living world and ordinary things—produce an effect which, perhaps, the mind can conceive but once, and will retain forever."

It is a trick of the guide to extinguish the tapers when in this hall, and leave the visitors for a few moments to experience the Cimmerian darkness—darkness which can almost be felt—the utter abstraction of what gives life and beauty to the outer world.

Near this apartment is Lady Washington's Bedchamber, on one side of which is a rude resemblance to a couch, with a milk-white canopy, richly fluted around; while on the other side of the beautiful little room is a toilet-table, with snowy drapery, overhung by an imaginary mirror, and scattered over with the usual paraphernalia of a lady's dressing-room.

In this vicinity is the Bridal Veil, a splendid sheet of white, glittering, translucent spar, which seems thrown over a hat, or, as has been suggested by others, the shelving back of an immense Spanish comb, and hangs in full, classic folds or heavy volutes almost to the clay-red flooring of the little chamber.

And, on and on, one is conducted, through narrow passages and more commodious arches; up and down precipices; among tumbling heaps of pilasters, columns, and friezes, divided by strata at regular or irregular intervals, and pillared with the skill of the architect and mathematician, like the ruins of some vast Old-World temple; before the Diamond Mountain, flashing with its buried gems, and stalked over by the gigantic and ghostly Crane, which looks inquiringly toward the Rising Moon that throws its silvery light out in the voiceless midnight; and on and on, until we arrive at the end of the cavern, and are refreshed by a glass of as sparkling water as ever gushed from upper-world fountain and made merry music in the glad sunlight.

This subterranean spring is perfectly incrusted with stalactites and stalagmites; and an earthen jar kept in this part of the grotto, where the water is constantly dripping from the ceiling, is incrusted with younger but similar concretions.

The egress is somewhat varied from the ingress; and, in returning, the visitor is conducted to the Tower of Babel, or Magic Tower, a huge, columnar accretion, rising to the height of thirty feet or more, irregularly divided by strata at distances of ten or twelve inches, and fluted around by pillars an inch or more in diameter.

The Tower of Babel is perhaps the most regular and symmetrical formation in all this wonderful grotto, and most readily suggests the title it bears. It occupies the

CHAMBERS IN WEYER'S CAVE.

centre of an apartment filled with indefinable figures, which may suggest statues, ghosts goblins, or whatever will best please the fancy.

Near this is the Oyster-Shell, consisting of two huge, shelving pieces of spar, of a peculiar grayish white, and absurdly resembling the late home of a defunct monster bivalve. And Nature, to vindicate her providence, in close proximity to this fanciful concretion, has placed Solomon's Meat-House, from the fretted and groined roof of which is suspended a Leg of Mutton—a single instance of the old king's gastronomic propensities. In prudent nearness to the Meat-House is Solomon's Temple, or, as it is better known, the Shell-Room. In the centre of this apartment rises a massive column of dazzling white, as rich with grooves and flutings as if chiselled out to fill an artistic design; and this reaches the ceiling, which is thickly studded with sparkling stalactites, reflecting, as the tapers are held underneath them, the hue and lustre of every gem that holds light imprisoned. The Shell-Room, from the radish-like shape of the stalactites that hang from the ceiling, has also been called the Radish-Room; while almost every intelligent visitor finds some suggestive title to this magnificent hall.

And this, with the 'Possum-up-the-Gum-Tree—doubtless, Weyer's opossum, upon the final capture of which tradition is silent—completes a list of the most noticeable of the many noticeable freaks in which Nature indulges in these subterranean retreats.

Out of the usual route of exploration, but to be visited by special request, is a most beautiful pond, over which is the shelving sheet of spar from which the specimens usually sold are obtained. As a visit to this lake is very fatiguing and somewhat dangerous, it is not generally attempted, but well repays all fatigue or danger incurred.

A few moments after leaving the Shell-Room, the visitor grows sensible that the dim candles emit a dimmer light; if in summer, a warmer, and, if in winter, a colder, atmosphere greets one; and, climbing a slight ascent, he is once more in the face of day, and listening to other sounds than that of the human voice alone.

"Weyer's Cave," says the writer quoted, "is, in my judgment, one of the great natural wonders of the New World, and, for its eminence in its own class, deserves to be ranked with the Natural Bridge and Niagara, while it is far less known than either. Its dimensions, by the most direct course, are more than sixteen hundred feet, and, by the more winding paths, twice that length; and its objects are remarkable for their variety, formation, and beauty. In both respects, it will, I think, compare without injury to itself with the celebrated grotto of Antiparos."

Within a few hundred yards of Weyer's Cave is Madison's Cave, described by Mr. Jefferson; but it is less interesting than the former. Indeed, it is supposed that the entire mountain is a cavern, and, it is hoped, in time will be fully explored.

SCENES ON THE BRANDYWINE.

ILLUSTRATIONS BY GRANVILLE PERKINS.

NO minor stream in our country enjoys a wider reputation than the Brandywine. Its identification with our early history renders its queer title familiar to students in all parts of the land, while its rare beauties have been delineated by painters, praised by poets, and described by tourists, until few of us have not some pleasant recollection or anticipation connected with its wooded shores. It possesses attractions for the lover of the picturesque that are distinctively its own. Other streams are perhaps as beautiful as the Brandywine, but no other unites the beauty of wooded heights and tumbling water-falls with structures of art that give rare charm and even quaintness to the picture. What is there in an old mill by a brook that fascinates so quickly the eye of an artist and the heart of a poet? Long before Rogers told us of his earnest wish—

> "Mine be a cot beside the hill;
> A beehive's hum shall soothe my ear;
> A willowy brook that turns a mill,
> With many a fall, shall linger near"—

all lovers of the picturesque delighted in brook-side mills. Probably no object in Na-

COTTON-MILLS, RIDELE'S BANK.

ture or art has been so often drawn and painted. And yet, familiar as we are with old mills nestling quaintly amid summer foliage, we always discover a fresh fascination in each new example. Was there ever an artist who could resist the desire to add a new sketch of a subject of this kind to his portfolio? Whether the mill be one quaint and fantastic by virtue of its decay and ruin, or one that lifts its walls from the river-edge in large pretension, there is always a strange pleasure in this combination of the beautiful and the useful. The brook-side mill affords us almost the only instance of labor that is graceful, picturesque, and seductive. We can imagine a life of labor under the sweet and inspiring conditions of musical water-falls, shadowy forests, soft airs ladened with the perfume of wild-flowers, that would possess a certain rich and munificent poetic calm. Too often labor mars the landscape it enters, but the mill seems to partake of the spirit of its surroundings, to gain a charm from woods and waters, and to give one. This is peculiarly true of the factories along the Brandywine. They are of sufficient age to have mellowness and tone; glaring red brick does not enter into their composition; and they greatly vary and brighten the beauty of each woodland picture.

The Brandywine was called by the first settlers, who were Swedes, "Fish-kiln," a prosaic designation that fortunately did not cling to it. Its present title, while euphonious and distinctive, is somewhat difficult to explain. It is ascribed by tradition to the loss of a Dutch vessel laden with brandy, or *brand-wijn*. The wreck occurred in 1665, in the river just above its junction with the Christiana, and the shattered remains lay long in the waters, serving as a memento to keep alive in the heart of the community ceaseless regret for the loss of such good liquor, until the mourning Dutch sought to soothe their sorrow by naming the stream *in memoriam*, hoping, like Dogberry, to draw comfort from their losses. Many a greater river has been named for a smaller cause, as is sadly witnessed by the Big Horns and Little Horns, the Snakes and the Otter-tails; and the alleged reason may well be accepted; yet a few dissatisfied historians have sought to ascribe the name to the supposition that a slough on the East Branch, above the present borough of Downingtown, formerly discharged into the current a muddy stream that tinted it into the color of brandy-and-water. Such a libel upon the clear complexion of the creek must be instantly disavowed.

The Brandywine finds its head in the brooks issuing from the eastern declivity of the line of hills that form part of the boundary between the counties of Chester and Lancaster, in Pennsylvania. These hills are fairly entitled to their name of the Welsh Mountain, as their height makes them the water-shed from which streamlets tend eastward to the Schuylkill, and westward to the Susquehanna. The summit, possessing all the characteristics of a true mountain-top in its stunted growths and cool breezes, reveals an extended view of the adjacent country, while the range marks the climatic limit which makes Chester County display the green banners of approaching summer in advance of her fertile but more tardy sister of Lancaster.

Although rising in close proximity, the two branches of the Brandywine immediately diverge—the East Branch to flow eastwardly and then south; the West Branch to flow south and then east, until they meet again, after a very winding course of about twenty miles. Thence, as the Brandywine proper, the creek flows in a southeasterly direction through Chester County, forming part of the line of division between it and Delaware County, in Pennsylvania, and afterward passing through the State of Delaware until it unites with Christiana Creek, a little above its entrance into the Delaware River.

An endless series of pictures marks the course of the stream, and all its affluent brooklets partake of the same romantic grace as they flow among the verdant hills

Bridge over the Brandywine.

through the flower-decked plains and rocky dells that distinguish the region which it irrigates. Rock, woods, and water, mingle in scores of scenes of varied beauty, which, although differing in the lavish prodigality of Nature's handiwork, yet resemble in general characteristics the scenery shown in our initial illustration.

The channel is frequently narrowed by rocky and precipitous banks until the creek —as the Brandywine is often ignominiously termed—becomes a rippling rapid, and its force and value are proved by the innumerable mills that are built upon it. The rapid descent of the stream for a few miles above its mouth furnishes the power to the mills for which the city of Wilmington is so famous, and the multitude of smaller ones erected

on the upper waters of the creek bear witness to the fertility of Chester County, to which William Penn gave a plough as an armorial bearing.

Yet, to those familiar with its wandering course, the Brandywine must ever seem in memory—

"A silver thread with sunsets strung upon it thick, like pearls."

Despite its services in the gigantic flouring-mills, or even its dark deeds in the manufacture of gunpowder, it is throughout a great part of its course a peaceful wood-land-rivulet, softly washing verdant banks, or lapsing gently around mossy rocks. Being

"Rising Sun."

navigable for only a short distance above the mouth, its very uselessness to the voyager has screened it from many of the injuries of "improvements," and the great rocks stand untouched, while fern and laurel nestle about them, softening their ruggedness into beauty; and mosses, the growth of centuries, steal the echo from intrusive feet. Even the tributary streams that wander through the more open valleys are usually fringed with foliage, and the green, waving plumes of the cultivated weeping-willow and the silvery-gray wands of the water-willow mingle in the wind with the white, feathery branches of the blossoming chestnut-trees, which grow to such rare beauty in this region.

Having its source in high lands, the creek is remarkably subject to changes, the

POWDER-MILLS.

water sometimes creeping sluggishly as a narrowing thread amid exposed rocks, and anon with terrifying rapidity rising eight, ten, or even twenty feet above its usual height. Green meadows, embroidered with the delicate, faint blossoms of the Quaker-lady, the lovely wind-flower, and the sweet violet, and laced with a broad band of silvery water rippling gently over the stones, will be changed in a few hours into a tempest-tossed

Upper Powder-Works.

lake, upon which wrecked bridges and floating timbers are dashing frantically together, while the grunts of a protesting pig, pleading for rescue from an involuntary voyage, mingle with the clamor from an eddying hen-coop, whose clucking inmates are clinging to their own roof-tree in horror at the havoc.

The Brandywine, which, flowing through meadow and mead as it nears the Dela-

ware, forms, with the Christiana, two outstretched arms, between which lies the city of Wilmington, exhibits some of its greatest charms in the hill-region just behind the city. Its banks are a great natural park for the denizens of the busy town, who are never tired of resorting to them for rest and recreation. The shores are steep on either side; the trees are of splendid growth, often interlocking above the stream in fraternal embrace, letting the sunshine in upon the swift current in shimmers of glancing light. There is a superb drive along the stream, dense with shadow at the very height of noon, and affording, through the ever-fresh verdure, delightful glimpses of the river. But the charms of the stream are best appreciated by the foot-path along the edge of the water, over which the lofty trees hang superbly, while the swift current now flashes and gurgles over a shallow bed, now deepens and widens into calm and lovely lakes, now leaps, a miniature Niagara, over a rocky declivity. Pedestrians clamber the precipitous rocks, under rich forest-shades, to pluck fern, sweet-brier, and honeysuckle; while the romance of the adventure is heightened by the proximity of powder-mills, built expressly to burst out upon the water.

Some very old and picturesque flour-mills stand not far from the mouth of the river, where it is crossed by a bridge near the city, and close by is the ruin of a grist-mill, which, tradition declares, was in operation at the time of the Revolution, and rendered immediate service to the patriotic cause by grinding corn for the use of Washington's army when at Valley Forge. This is an object of no little interest, whether considered historically or with a view to the picturesque, and our artist has given a view of it. A very little way up the stream, in the heart of its sylvan beauties, at a location known as Ridele's bank, are cotton-mills of large extent and eminently picturesque setting. The scene here is delicious. One lingers in the dense shadows of the forest-covered bank with delight, and discovers, in the mingled sounds of rushing water and buzzing wheels, a strange charm. Repose and activity, the hush of shadowy woods, and the hum of labor, seem to blend in delicious harmony; while the gray walls of the buildings have no harsh contrast with the magnificent masses of verdure in which they are placed.

For miles the river continues, with unbroken beauties of forest, until a beautiful hamlet is reached, which rejoices in the queer name of "Rising Sun." We cross the river, just before reaching this village, by an ancient bridge, drive through the hamlet of low stone cottages, and presently come to the famous Dupont powder-yards, where the beauties of Nature and the toils and dangers of industry strangely mingle. Long avenues of greenest willow-shade, and turf, soft as velvet and spangled with flowers, give to this enclosure an almost park-like appearance. Here grow the bluest violets of the spring-time, and, from the opposite woody shore, Autumn's gay banners droop glowing to the water's edge. Ferns, rivalling the choicest pets of the conservatory, are found in the mossy ravines, and the scarlet flame of the cardinal-flower lights up many a shady retreat. But, as a suggestive contrast to the surrounding beauty,

MILLS AT ROCKLAND.

throughout the length of this Eden run the iron lines of a horse-railroad, and here and there, crouching back against the hill-sides, like grim giants bracing themselves for a spring, stand structures of heaviest masonry—the powder-mills. These mills are erected close to the water's edge, and are scattered along the river-side for a distance of three miles. They are not so picturesque as the cotton- and grist-mills, but they obtrude very little upon the landscape; while the terrors of an explosion which they threaten add thrilling zest to the interest of the spectator. Scarcely a year passes that one of these mills does not startle the silent hills with the thunders of an explosion; but the grim

Old Grist-Mill of the Revolution.

horror thus imported by man into the scene is compensated for, so far as the attractions of the spot are considered, by animating pictures of the willow-peelers—the acid from willow-branches entering extensively into the manufacture of gunpowder. "The month of May," writes one describing the scene, "is the harvest of the willows. Coming from all directions toward the powder-works, wagons may then be seen piled high with willow-branches, some in their natural green state, and tufted here and there with leaves; others peeled, and looking at a little distance like huge masses of yellowish ivory. There is scarcely a farmer for miles around but has a group of willows shading his spring-house, or a line of their green boughs fringing the brook in his meadow-pasture. Every

three or four years the faithful trees are deprived of their branches, and left standing, like dejected Samsons, shorn of their locks. But it is not for long. Before the wild-roses of June have vanished from the hedges, the ugly scars of the hatchet are hidden by a growth of fresh young twigs, which, when another summer comes round, will be well on their way toward a second harvest. Few crops are more remunerative—six dollars per cord being the price given for green branches, or eight dollars if the bark is removed. The greater part of the peeling, however, is done in the immediate vicinity of the works. Here and there along the river-side, scattered about in the glad May sunshine, are seen busy groups—old men whose white locks float in the gentle breeze, brisk matrons, and deft-handed children. It makes a pretty picture, especially when the little ones, grown tired of the monotonous task, run away for a chase after butterflies or to gather the golden dandelions by the margin of the stream.

Moonlight on the Brandywine.

"Two dollars per cord is the price given for peeling. When the branches are large, this pays excellently, but a load of slender boughs is a sore vexation. The bark is also the property of the peeler, and, throughout the summer, this aromatic fuel keeps the pot boiling in many a cottage-home. In the evening, when the bright sunshine has vanished, and the songs of the birds are stilled, when the glow of a lantern hung upon a tree above each band of workers reveals their whereabouts, and adds to the festal appearance, the force is largely increased. Young men from the powder-yards, maidens from the factories, and servants from the neighboring farms, gather there

then for pastime and company. It is their *casino*. When Kate brushes the lint of her loom from her dark curls, she ties a bright ribbon around them; and Molly, hurrying through her dairy-work, dons a fresh, white apron. For who knows whom they may meet among the willows?—

"'Mony lads' and lassies' fates
Are there o' nights decided.'

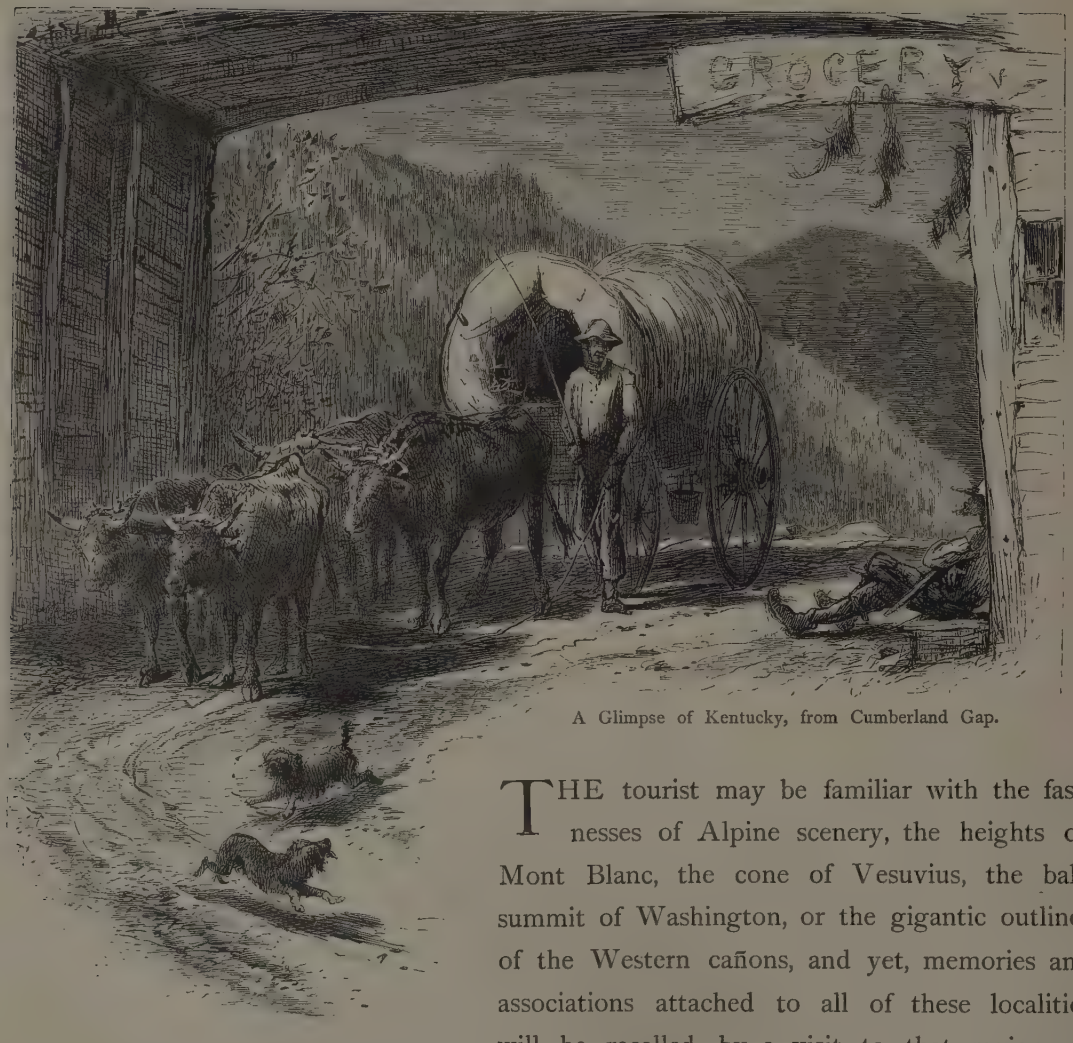
"It is now that popular peelers prosper. An old man with a large fund of anecdote, or a shrewd woman who will promise the young folks a party when the season is over, gains much help from these merry amateurs, and the lagging cords of glistening branches are soon piled high by their dexterous fingers. Until a late hour their laughter echoes over the quiet river, and the lonely night-hand, going to 'change his mill' far down the yard, is cheered by the gay songs borne to him along the water."

Above the powder-yard stretch the same scenes of beauty. At Rockland are extensive paper-mills, which, like all other factories on the Brandywine, form a pleasing feature in the landscape, and stand, with their gray tints, in harmonious relief against the background of verdure.

There is danger that the beauties of the Brandywine, near Wilmington, may in time be sacrificed to the greed of "enterprising" citizens, unless measures are taken to permanently secure them, by the conversion of the shores into a public park. The people of Wilmington have the example of their sister city of Philadelphia, and the banks of the Brandywine, like those of the Wissahickon, should, by timely public interposition, be set apart as things of beauty and loveliness forever.

CUMBERLAND GAP.

WITH ILLUSTRATIONS BY HARRY FENN.



A Glimpse of Kentucky, from Cumberland Gap.

THE tourist may be familiar with the fastnesses of Alpine scenery, the heights of Mont Blanc, the cone of Vesuvius, the bald summit of Washington, or the gigantic outlines of the Western cañons, and yet, memories and associations attached to all of these localities will be recalled by a visit to that region of America in which the Cumberland Mountains trend obliquely across the States of Kentucky and Tennessee; because, somewhere in the four thousand four hundred miles of territory occupied by these "everlasting hills," they present to the eye almost every variety of picturesque expression that elsewhere has excited wonder or admiration.

Great ridges—now roofed over with thickets of evergreen, now padded with moss and ferns, or, again, crowned with huge bowlders that seem to have been tumbled about in wild disorder by some convulsive spasm of the monster beneath—shoot suddenly upward, from two thousand to six thousand feet, and become, as it were, landmarks in

the skies, that are visible at such distances as to appear like a part of the clouds. Here and there, a broad table-land, on which a city might be built, terminates abruptly in sharp escarpments and vertical sheets of rock, seamed and ragged, like the front of a stupendous fortress that has been raised by giant hands to protect the men of the mountains from the encroachments of the lowlanders. There are other rocks full of grand physiognomies; caves that might be the hiding-places of the winds; water-falls where the melody of the rills is never silent; glens and chasms; and forests so dense that a man might live and die in their recesses—

"The world forgetting, by the world forgot."

And so, in every conceivable shape that can appeal to the eye of poet, artist, or geologist, Nature has here piled up her changeless masonry of creation. The name *Cumberland*, let us here say, was given to these mountains by the first discoverers, a party of hunters from North Carolina, in honor of the Duke of Cumberland, at that time (1748) prime-minister of England.

The "ridges" referred to are among the curiosities of the Cumberland region. Aside from the fact that they observe a species of parallelism to each other, they contain numerous "breaks," or depressions, which, in the peculiar configuration of the country, appear to the traveller who is at the foot of the mountain to be distant only a few hundred rods; yet he must frequently ride for miles through a labyrinth of hills, blind roads, and winding paths, before he can reach the entrance and pursue his journey.

The chief and most celebrated of these great fissures, or hall-ways, through the range, is known as "Cumberland Gap." This gap is situated in East Tennessee, near the Kentucky border, about one hundred and fifty miles southeast from Lexington, and may be regarded as the only practical opening, for a distance of eighty miles, that deserves the name of a "gap." There are other places which are so called, but it is only for the reason that they are more easy of access than because of any actual depression in the mountain. At a place called "Rogers's Gap," for example, which is eighteen miles distant from Cumberland Gap, there is no gap whatever; but the road, taking advantage of a series of ridges on the northern side, and running diagonally on the southern side, is rendered, with great exertion, passable by man and beast.

The gap depicted by our artist is about six miles in length, but so narrow in many places that there is scarcely room for the roadway. It is five hundred feet in depth. The mountains on either side rise to an altitude of twelve hundred feet; and, when their precipitous faces have been scaled by the tourist, and he stands upon the summit, the view, beneath a cloudless sky, is one of the most beautiful in America. Southward, there stretch away the lovely valleys of Tennessee, carpeted in summer with every shade of green, and in autumn with every rainbow tint—the rolling surface resem-

CUMBERLAND GAP, FROM THE EAST.

bling in the distance a vast plain, written all over with the handiwork of human enterprise; while, looking to the north, the vision is lost among a series of billowy-backed mountains, rising barrier-like to hide the luxuriant fields of Kentucky. "Across the country," is here a significant phrase; for the luckless traveller whose route lies in that direction must be prepared to encounter—

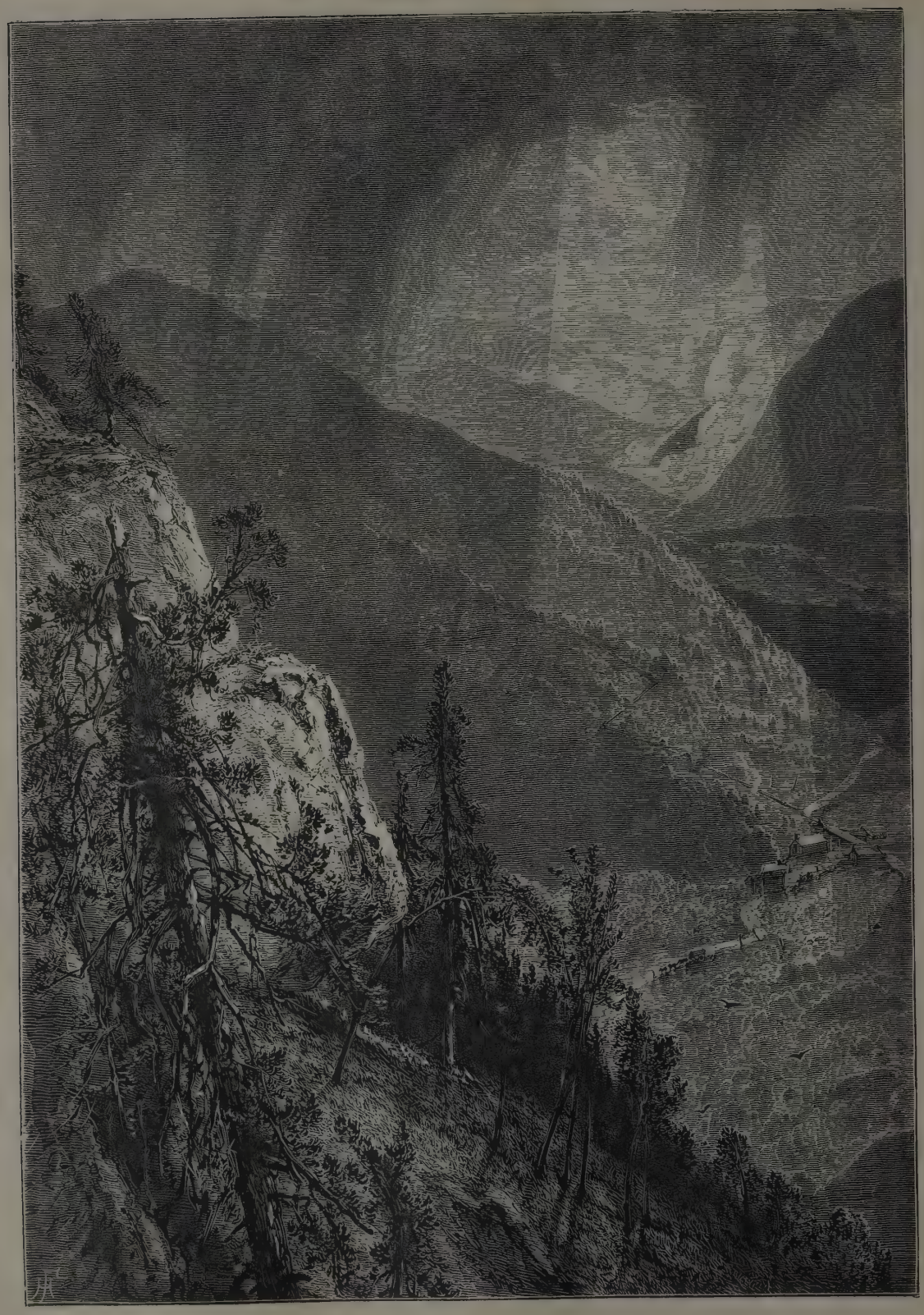
"Wave on wave succeeding."

The gap delineated in the accompanying sketches is a great highway between Southwestern Virginia and her sister States adjoining. Hence, during the late war, the position was early deemed important, and was occupied and strongly fortified by the Confederate Government. Cannon bristled from the neighboring heights, and a comparatively small force held the pass for many months, defending in that secluded mountain-recess the railroad connections between Richmond, North Alabama, Mississippi, Nashville, and Memphis, on the integrity of which so much depended.

The approach to the range from the northeast side, after leaving Abingdon, Virginia, is over a rough, broken country; and the only compensation to the traveller, as he saunters along on horseback, is in the enjoyment of bits of scenery wherein rocks and running streams, mountain-ferries, quaint old-fashioned mills, farm-houses and cabins perched like birds among the clefts of hills, lovely perspectives, wild-flowers and waving grain, and a homely but hospitable people, combine in charming confusion to keep the attention ever on the alert.

The road through the gap, winding like a huge ribbon, to take advantage of every foot of rugged soil, up, down, and around the mountains, is but the enlarged war-trail of the ancient Cherokees and other tribes, who made incursions from one State to the other. You are following the path pursued by Boone and the early settlers of the West. Passing through the scenes of bloody ambuscades, legends, and traditions, it would seem almost a part of the romance of the place if now an Indian should suddenly break the reigning silence with a warwhoop, and its dying echoes be answered by the rifle-shot of a pioneer. In short, it is an old, old region, covered with the rime of centuries, and but slightly changed by the progress of events.

Of residents in the gap, there are but few. One of these has been enterprising enough to establish, near an old bridge, which is shown in the picture, a grocery-store, and obtains his livelihood by trading in a small way with the teamsters of the passing trains, and exchanging whiskey, clothing, etc., for the produce of his neighbors. Similar establishments will be found at intervals of five, ten, or fifteen miles; sometimes they are half hidden from view in the coves, or "pockets," of the mountains. But they absorb much of the small "truck" that finds its way to market from this section. The commodities thus purchased and shipped in the mountain-wagons through the gap, *en*



CUMBERLAND GAP, FROM EAGLE CLIFF.

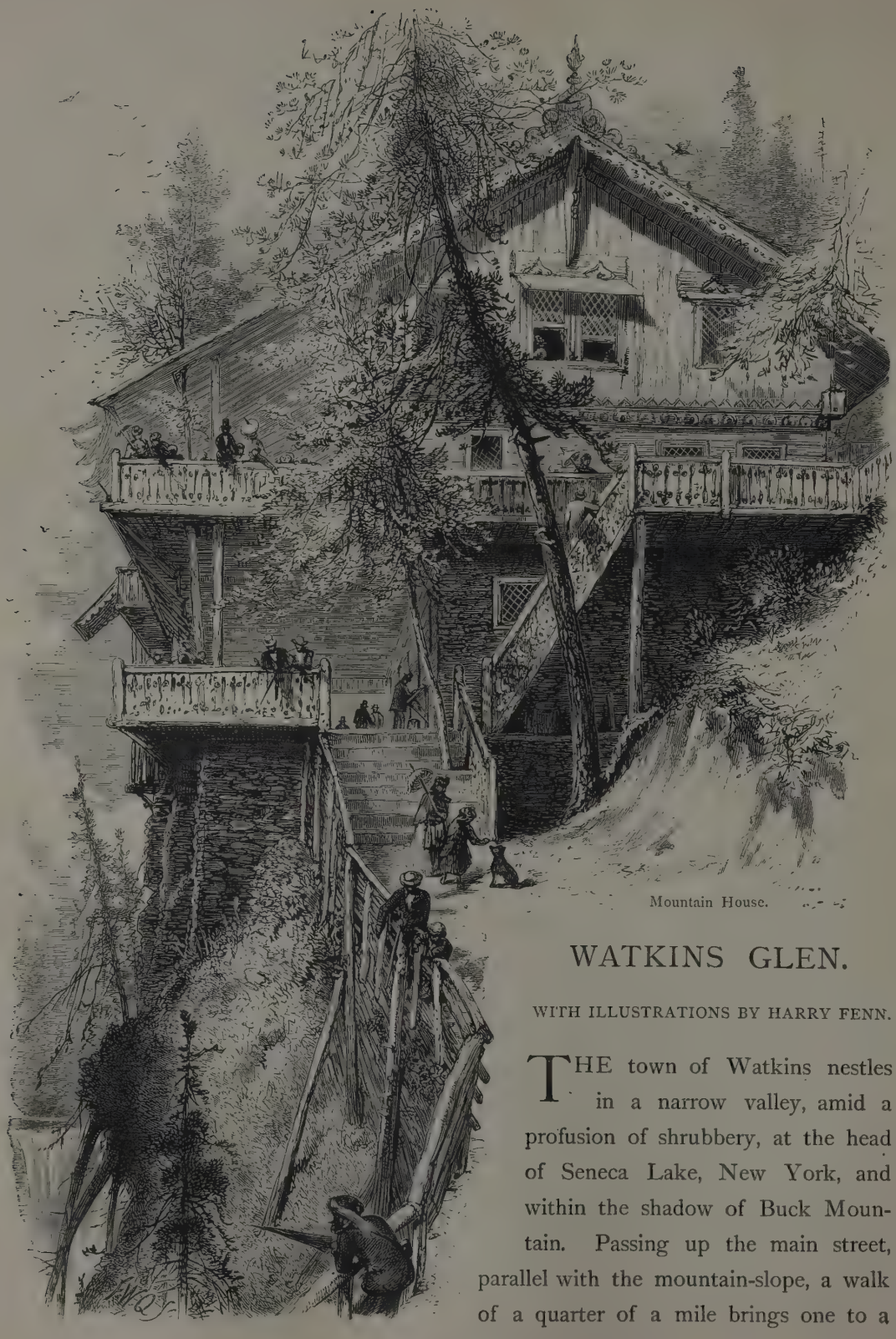
route to Baltimore and elsewhere, consist of dried apples, peaches, chestnuts, butter, lard, flaxseed, bacon, etc. Horse and mule trading is likewise carried on to a considerable extent; and sharp-witted, indeed, must be that man who can buy or sell more shrewdly than these self-same mountaineers, whose lives have been hammered out on the anvil in Nature's own workshop.

As a class, they are a large-bodied, large-hearted, large-handed people, rude in speech, brave in act, and honest in their friendships. They may know nothing of the conventionalities of society, but they will exhibit the "small, sweet courtesies of life"—as they understand them—with a readiness of generosity that makes one "feel at home." They may have but a single room in their cabin, yet you will be invited to enjoy the night's hospitality like one of the family, and may go to bed with "he, she, and it," on the family floor, with the manifestation of no more curiosity or concern, on the part of the individual members thereof, than if they had been born without eyes. And in the morning, after a "pull" at the "peach-and-honey" and a breakfast of hog and hominy, a long stride by your horse's side for three or four miles will tell you that the mountaineer knows how to "speed the parting guest," in his simple fashion, with a grace and hospitality that come straight from the heart.

The road through a portion of the gap, and one of the caravans which are frequently passing, may be seen in one of the accompanying pictures; while in another sketch is a view of a primitive old mill, now almost in ruins, where grain is ground for the neighbors; but it is situated in a spot so picturesque that, if money could buy the beauty of Nature, long ago it would have been transplanted to become the site of a rural palace.

Whatever may be the peculiarities of the region, social or otherwise, the time cannot be far distant when the whole of this wild tract must yield to the march of improvement, and pour forth the treasures of mineralogical wealth now latent in its soil. Already, a railroad is in process of construction, that is destined to cut the backbone of Kentucky and Tennessee in twain, and open a new avenue of communication between the East and West; while geologists and engineers are "prospecting" among the mines.

Iron exists in abundance—a common variety being the red iron-ore, which soils the fingers, and is generally composed of small round and flat bodies, for which reason it is called "lenticular ore." Not unfrequently, fossils, shells, and a species of coral, are found in the mass, showing that at some period in the misty past the sea or its tributaries have swept through the heart of the continent. At some points in Cumberland Gap the iron is hard enough to be quarried out in blocks, and this vein of metal has been traced one hundred and fifty miles. It is from twenty-four to thirty inches thick, and is of excellent quality. Coal is likewise found in this region, and, as far back as 1854, many thousands of bushels were transported through the gap.



Mountain House.

WATKINS GLEN.

WITH ILLUSTRATIONS BY HARRY FENN.

THE town of Watkins nestles in a narrow valley, amid a profusion of shrubbery, at the head of Seneca Lake, New York, and within the shadow of Buck Mountain. Passing up the main street, parallel with the mountain-slope, a walk of a quarter of a mile brings one to a

bridge which spans a shallow stream. This stream has cut its way through the lower slope of the mountain-range, and formed for itself a short pass, or *cul-de-sac*, which terminates abruptly, at a distance of a few hundred yards, in a lofty wall, that stretches across the pass and bars all further progress.

The wall is not, however, continuous on the same line, but falls back in the centre, and forms a cavernous recess, from one angle of which the stream issues. Behind this solemn gate-way of natural masonry, broken and abraded in places by time and the action of the elements, lie the gloomy ravines, and the infinite variety of water-falls, and foaming rapids, and deep and silent pools, which have become famous, within recent years, under the designation of Watkins Glen.

The mode of ingress for visitors to the glen is by rude stairways, running diagonally along the face of the wall, braced strongly to it, and propped, also, firmly from beneath. Landing-places are provided at intervals, from which other stairways spring; and thus the ascent is made until the angle of the northern portal is turned and a footway gained, when the first difficulty—the entrance to the gorge—is surmounted.

We are now in Glen Alpha, as it has been somewhat fantastically styled. Inside the great rock barrier, which we have just succeeded in passing, a narrow but secure bridge crosses the chasm; and from this bridge a fine view is had of the first cascade, as it pours swirling through a rift in the rocks, and falls, roaring and foaming, into a deep basin, scooped out of the solid rock-bed by the constant fret and chafe and turmoil of the waters. Quitting the bridge, and clambering up a series of steps, we gain presently a narrow foot-path, cut out of the face of the cliff, and follow its fantastic windings until all further progress is barred by a transverse wall, over which the waters of the long cascade fall from a great height into the dark pool below. At this point the rugged and lofty walls of the gorge draw closer together. Where the foot-path ends, a long staircase, wet with the mist and spray of the cascade, is flung, at an angle of ninety degrees, across the tremendous chasm, and at its upper end connects with another foot-path, some fifty feet above the one which has just been abandoned. After traversing this new path a little space, we come upon a series of cascades, dropping from one low ledge to another, with deep pools and broad shallows intervening.

Pursuing our onward and upward course, the aspect of the place grows weird and ghastly. The world, and the things of the world, are utterly shut out, and we seem to be struggling among the ruins of some older creation. The rocks take on more grotesque forms. The air is cold and moist. The path—a mere ledge in the face of the cliff—overhangs a deep chasm, at the bottom of which the waters chafe and struggle and brawl. Overhead, the gray walls rise, tier upon tier, inclining gradually toward each other, until finally, far upward, only a narrow slip of sky can be seen, with the light struggling dimly through a fringe of hemlocks.

Beyond this gloomy pass, with its strange, unearthly aspect, the ledge we are

Entrance to the Glen.

traversing ends abruptly, and the obstacles to a farther advance have to be overcome by a succession of stairways, now crossing to one side, now changing to the other, until, by an ever-ascending grade, another pathway is reached. Here the rock walls recede, and sufficient soil has accumulated over them to admit of the growth of shrubs and large evergreen-trees. The path, too, is easier. Following it for a short distance, we come to a stairway placed against the bank, and, on ascending it, reach a shelf of the mountain on the north side of the ravine. On this shelf is perched the Mountain House, built somewhat after the style of a Swiss *chalet*, but comfortably furnished, and well supplied with essentials and non-essentials, and affording an excellent resting-place for those who have become fatigued with their rough but exciting journey, thus far, through the marvellous gorge.

Leaving the Mountain House, the path dips steadily downward, almost to the bed of the stream; and, after passing another series of small cascades and rapids, we cross a bridge to the opposite side of the gorge, where the cliffs, rent and torn into every conceivable

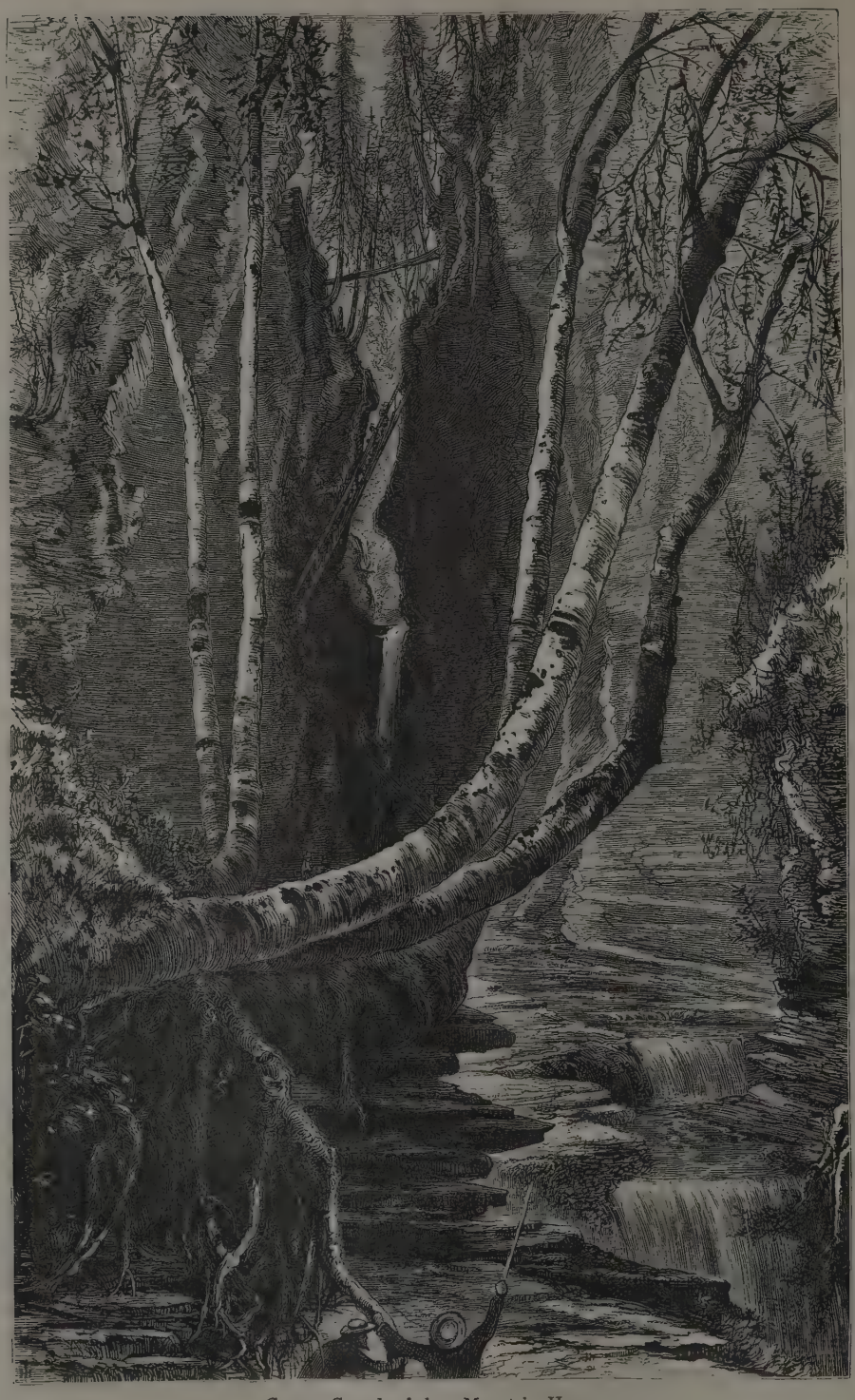
shape, first contract, and then expand into an enormous amphitheatre, to which has been given the name of Glen Cathedral. The area is vast. The immense walls, nearly circular in form, rise to a great height, and, where they terminate skyward, are crowned with the fresh, green, pendulous foliage of the hemlock. The floor of this amphitheatre is almost as level as if it had been paved by human hands; and over the great slabs of rock, laid regularly and close-jointed, the stream spreads out, but an inch or two in depth, flowing easily and quietly, with scarcely a ripple to break the smoothness of its surface.

Passing through a break in the great circular wall, by a path still broad, but more broken and water-worn, the tall cliffs recede upward

Glen Alpha.

from their base; and on the slopes thus formed, and shelving outward, some hemlocks and deciduous trees find sustenance. Suddenly, the tall cliffs, as if spurning these picturesque accessories, close in again, and in the cavernous gloom of the remote distance another cascade is seen flowing in a white sheet over its rocky ledge, and pouring its waters into the gorge.

On nearing this fine cascade, another stairway, thrown across the gorge to a higher shelf projecting from the face of the cliff, gives access to a remarkable scene. Before us is what is called the Glen of Pools, from the variety and extent of its water-worn basins. Standing on the bridge, and looking up the gorge, the eye falls upon a series of cascades and rapids, low and



Cavern Cascade, below Mountain House.

broad, but very beautiful. The enclosing walls are again sufficiently broken to allow of the growth of trees in some places, and to let the light in freely. Beyond these, again, cascades of greater breadth drop from one rocky ledge to another, foaming and seething;

Rainbow Falls.

while over the southern wall, and the pathway that clings to it, a thin stream, falling from a great height, spreads itself out like a veil of silver mist, and mingles its waters with those in the rock-bound channel far below. At certain seasons of the year the sun

Cliffs, Glen Cathedral

is at an angle which sends glancing lights through the gorge, which break in prismatic colors on this thin fringe of a water-fall, and hence give it the name of Rainbow Falls. But the nomenclature of the glen is hopelessly free and confusing, each season giving a new series of designations to its various falls and aspects. "Glen Cathedral" is a term that seems to have adhered with some tenacity, but the other water-falls and pools have almost as many terms as there are different tastes and fancies among the visitors; and names, at best, apply to one feature only of the scene they describe, whereas in each picture there are usually a hundred phases, that rival each other in beauty and interest. In this strange rift in the rocks the eye shifts from beauty to beauty, from marvel to marvel, with restless delight. The tumbling water-falls; the dark, silent pools; the light above reflecting from cliff to cliff, and glancing with rich beauty on rock and cascade; the fantastic growths of trees at every 'point of 'vantage," and the interlacing branches above; the picturesque bridges and stairways; the profound si-

lence, broken only by the sound of waters — all these conditions make up a fascinating charm that each succeeding picture varies in detail, but which pertain with almost equal force to every part of the entire glen. Among the strange beauties of the place are the dark pools that lie at the foot of the cascades. The water in this strange gorge is of a brilliant green, and beautifully transparent. In shallow places it is of an almost perfect emerald hue, and in deep pools becomes the darkest sea-green. There is one pool which no one has ever been able to fathom. A pole thirty feet long, thrust into it totally disappeared, never returning to the surface. It is assumed that a channel exists far down under the rock, the subterranean current thus created sweeping objects let down in the pool out of reach or of power to return.

The very picturesque Mountain House, built directly on the side of the rift, affords one of the few instances where, in this country, man has worked in harmony with Nature. This *chalet* is, in its own way, al-

Curtain Cascade, Havana Glen.

most as attractive as the glen itself. Its balconies overhang the gorge, with trees jutting up through them from ledges in the rocks below; and the visitor looks down from his advantageous position into depths of the glen that remain inaccessible. Large hotels are now promised, in view of the yearly increase of visitors; but it is to be hoped the *chalet* will never be disturbed.

Bridal Veil, Havana Glen.

It is remarkable that this freak of Nature has only recently become known. None of the old New-York gazetteers make mention of it. The entrance to the glen was long familiar to the people of the neighborhood; but, until bridges and stairways were made, it was impossible to explore it, and hence nothing further was known of it beyond that which was revealed by a hasty glance into its dark mysteries. The extreme

length of the glen is about three miles, and the cliffs, at the deepest part of the gorge, have an altitude of probably three hundred feet.

Three miles south of Watkins is Havana Glen. It is very picturesque, more airy, and is quite easy of access, but is wanting in those elements of gloom, and vastness, and solemn grandeur, which are the peculiar characteristics of Watkins Glen. Nevertheless, there is a class of tourists who admire Havana Glen even more than its great rival. The cascades of which illustrations are furnished are but two of many which the tourist will meet with, in rapid succession, as he ascends it. The same system of stairways and ladders prevails as at Watkins; but these aids to progress are fewer in the former, and the paths broader. The glen, moreover, is short, as compared with Watkins, while the height, from the level of the valley to the table-land above, is much less. In the early summer months the volume of water is greater than that at Watkins; but it is said to shrink almost to a thread during the heats of July and August, while that of Watkins, being fed from bold springs far up the mountain, is much more permanent, though subject to the influence of the seasons.

Gothic Arch, Watkins Glen.

Sag Harbor.

SCENES IN EASTERN LONG ISLAND.

WITH ILLUSTRATIONS BY HARRY FENN.

THE eastern end of Long Island is penetrated by a wide bay, extending inland a distance of thirty miles. A large island divides the bay into two distinct parts, the outer division being known as Gardiner's Bay, and the inner, which is subdivided by promontories, as Great Peconic and Little Peconic Bays. This large estuary gives to Long Island the shape of a two-pronged fork. The prongs are of unequal length, that upon the southern side exceeding the northern branch full twenty miles. The southern branch is distinguished as Montauk Point; the northern, until recently, as Oyster-Pond Point, but now is sometimes called Orient Point, deriving this name from the village of Orient, situated within its limits. Although Orient Point is shorter than Montauk Point, yet a succession of islands carries the line of this fork a long distance northeasterly into the sound—all of the islands, it is generally believed, once forming a portion of the northern peninsula. The most noted of them is Plumb Island—this name is popularly spelled *Plum*, and in Thompson's "History of Long Island" we find it indiscriminately given both *Plumb* and *Plum*—upon which is a light-house, well known to mariners. The channel between this island and the Point, known as Plumb Gut, has been rendered famous by the well-known exploit of Mr. Bennett's yacht. It is a common tradition at the Point that, in the last century, the passage to

the island could easily be crossed, at low tide, on foot.

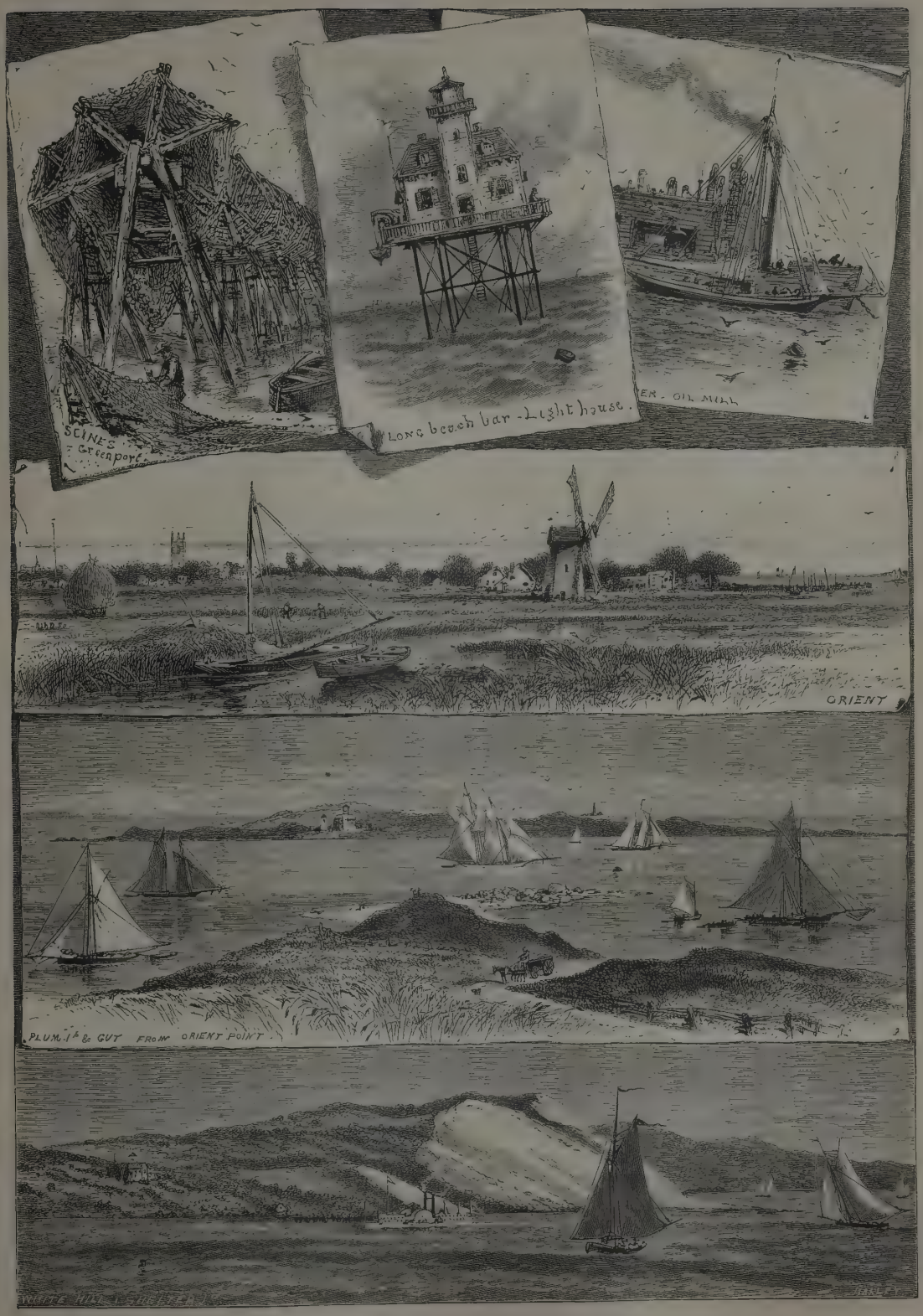
Gardiner's Bay is partly sheltered from the sea by a long, narrow, and low stretch of land, extending, on a line southerly with Plumb Island, across the open space that lies between the two points. Westerly, the bay is separated from the inner division of this inland sea by what is appropriately known as Shelter Island, which extends from opposite Greenport on the north branch to near Sag Harbor on the south branch. This island is high and beautifully wooded, and possesses so many attractions as a summer resort that large hotels are now erecting upon it. It has also been selected by the Methodists as a ground for their annual camp-meetings. A more beautiful place could scarcely be found for the purpose. Unlike all this portion of Long Island, it is crowned by noble hills, from the summits of which superb views can be obtained of the entire width of Long Island, the sound, and long

View from White Hill, Shelter Island.

stretches of the open sea. From White Hill, opposite Greenport, Orient Point is visible its entire length, charmingly dotted with villages, while beyond lies the sound, always white with many sails. From Prospect Hill, close at hand, Sag Harbor, and, far off, the open ocean, can be discerned. The Indian name of this island is Manhansack-aha-qusha-wamock, which we hope the reader will find no difficulty in pronouncing or remembering. The translation is rendered as "an island sheltered by islands," which is as poetical and pleasing as it is geographically accurate.

Eastern Long Island is famous for its fisheries. Its vast bays and adjacent seas abound with blue-fish, mackerel, and a small fish, valuable only for the oil extracted from it, called moss-bunker. This fish has built up in all this region an extensive and profitable industry. Numerous oil-factories recently lined the shores of the main island, and greatly marred the beauty of Shelter Island; but the horrible odor perennially escaping from them at last aroused a popular crusade, which resulted in their being legally declared public nuisances, and their removal ordered. But the industry was too profitable to readily surrender; hence it devised large floating oil-mills, and now, here and there over the surface of Gardiner's Bay, may be seen huge, black, uncouth, and yet picturesque-looking objects, always surrounded by waiting vessels, and ever vomiting into the blue air volumes of black smoke. But they scarcely mar the picture, and the odor of decayed bunkers never reaches the shore. The moss-bunker, menhaden, or bony-fish, is a little creature of something near a pound only in weight—to the great whale what a fly is to an ox. But it is caught in prodigious numbers, as many as one million having been taken at a single haul of a draw-seine from shore, enough to yield fifteen hundred gallons of oil. The fisheries in this section, whether considered as an industry or as a means of sport, give it its peculiar interest. The huge reels for winding the immense nets, seen all along the shores, are striking and picturesque incidents in the landscape.

Greenport, on the northern branch, is the terminus of the Long Island Railroad. It is comparatively a new settlement, dating only from 1827; while East Hampton and Southampton, on the southerly fork, are nearly two centuries older. There were settlers on Oyster Point, however, as far back as 1646, one Mr. Hallock having, in that year, purchased the district from the Indians. But no towns were built up until long after. The settlers on the southern fork, notwithstanding they came from the neighboring shores of New England, passed Orient Point, inviting as it must have been with its rich soil and varied greenery, to the pine-barrens and grassy downs of Montauk. Greenport is a very pretty town — as green, neat, and quiet, as the ideal New-England village. The cottages that line the well-shaded streets are hid among trees, and nowhere is decay or unwholesome poverty apparent. The drive from Greenport to the extreme of Orient Point is very charming. Near the town are many handsome villas and cottages, while flourishing farms and neat farm-houses enliven the road during the

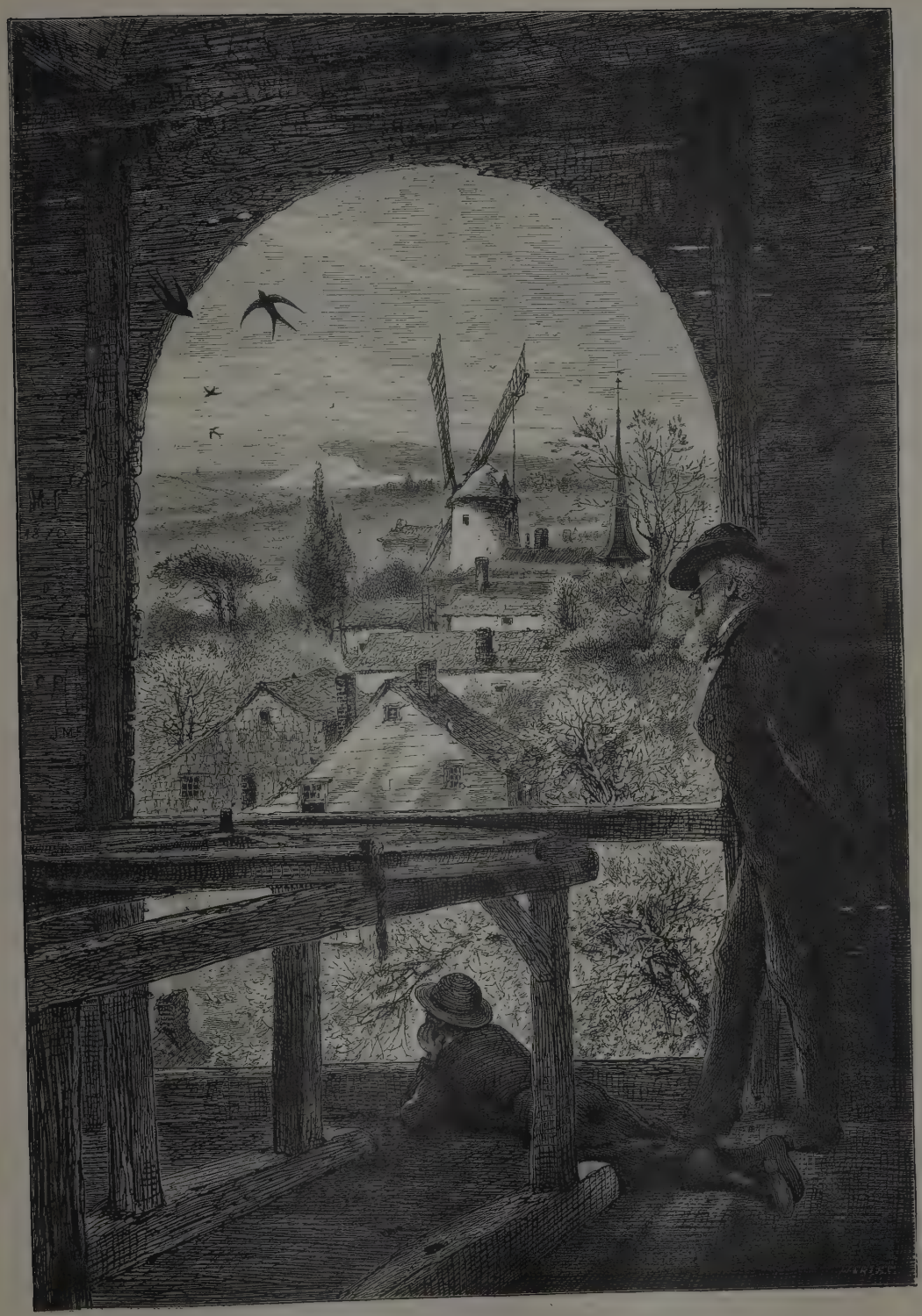


EASTERN LONG ISLAND SCENES.

entire journey. The village of Orient, through which we pass, has a prosperous and pleasing aspect; and all along the drive the scene is varied by frequent glimpses of the sound on one side and the bay on the other. At Orient Point there is a summer hotel, where in July and August great numbers come to enjoy the sea-air and the fishing. There is animation always in the picture presented here. On the sound, steamers and coasting-vessels come and go incessantly; while, in the bay, fleets of fishing-boats ever hover on the horizon, and yachts and smaller pleasure-boats give life and animation to the nearer scene.

Returning to Greenport, the traveller who explores this region will next desire to reach Sag Harbor. A steamer from New York touches at Orient and Greenport, and makes Sag Harbor the terminus of its route; but a pleasanter way to make the journey from Greenport is by sail-boat. The course lies around Shelter Island, and, if winds are fair, the voyage can be accomplished in two hours. Sag Harbor was settled in 1730, nearly one hundred years before Greenport. It is an ancient whaling-place. When Long Island was first settled, whales were common visitors to its shores, and boats were always ready for the pursuit of those welcome strangers. The whales, when caught, were drawn upon the shore, cut in pieces, and sent to primitive boiling-establishments near at hand. When the land of this region was purchased of the Indians, the sachems were allowed, by the terms of purchase, to fish in all the creeks and ponds, hunt in the woods, and to have the "fynnes and tayles" of all whales cast upon the coast. From the pursuit of whales on the coast there naturally arose expeditions of a more ambitious character, and in the early part of the present century we find the people of this town largely interested in the Pacific and Indian Ocean whale-fishing. But eventually Nantucket and New Bedford obtained the monopoly of this business, and, long before whaling began to decline in these towns, it had known its best days for the people of Sag Harbor. The fisheries of the bay are now the principal dependence of its citizens, although a cotton-mill indicates the development of other industries. Sag Harbor is old, quaint, and fish-like; it must remain a matter of taste whether the traveller should prefer its semi-decayed antiquity to the orderly and trimmed newness of Greenport.

But Sag Harbor has a measure of newness by the side of East Hampton, on the southern branch, and the most easterly town of Long Island. This township was settled in 1649, by thirty families from Lynn and adjacent towns of Massachusetts. The land was purchased of the famous Montauk tribe, remnants of which are still found about Montauk Point. This part of our country does not seem to have the bloody Indian record that distinguishes so many sections. The early settlers, for the most part, lived harmoniously with the original occupants of the soil. Instead of making the red-man their determined enemy, measures seem to have been taken to secure his kindly coöperation; and the remains of the ancient tribe now upon the island, fishing in the same seas



EAST HAMPTON, FROM THE CHURCH BELFRY.

and hunting upon the same ground their fathers did, bear witness to the humanity and forethought of the first settlers of this region.

East Hampton consists simply of one wide street, nearly three hundred feet wide. There are no hotels, no shops, no manufactories. The residences are principally farmers' houses, congregated in a village after the French method, with their farms stretching to the ocean-shore on one side, and to the pine-plains that lie between the town and the bay on the other. Its wide street is lined with old trees, and a narrow roadway wanders through a sea of green grass on either side. Perhaps no town in America re-

Home of John Howard Payne.

tains so nearly the primitive habits, tastes, and ideas of our forefathers as East Hampton. It is rapidly becoming a favorite place of summer resort, visitors at present finding no accommodation save that offered by private families; but its growing popularity renders the erection of hotels almost certain, and then good-by to its old-fashioned simplicity!

Our illustrations include a view of this primitive village from the belfry of its old church, which the people, since Mr. Fenn made his sketch, have inexcusably destroyed—the only instance in the town's history of a disregard for its time-honored memorials. The antiquity of this building gave it interest, but it possessed special antiquarian value to the visitor on account of its identification with one of the most famous

divines in our history. Here the Rev. Lyman Beecher officiated as minister during a period of twelve years, from 1798 to 1810; and during his residence in the town two of his distinguished children, Catharine and Edward, were born. The view from the belfry of the church is pleasing, the distant glimpse of the sea contrasting charmingly with the embowered cottages in the foreground. The old wind-mill gives quaintness to the picture. Two of these queer piles stand at the east of the village. They are very picturesque, reminding one forcibly of the quaint old mills in Holland which artists

Interior of Payne's "Home, Sweet Home."

have always delighted to paint. They form a distinctive feature of this part of the island, inasmuch as there are few similar structures existing anywhere in our country.

But East Hampton is not only renowned as the residence of Lyman Beecher, but of one peculiarly associated with our best impulses and feelings. It was here that John Howard Payne, author of "Home, Sweet Home," passed his boyhood. It is commonly asserted that he was born in the very old, shingled cottage pointed out as his residence; but of this there is some doubt. That his father resided here during the tender infancy

of the lad is the better-supported story; but here, at least, the precocious lad spent several years of his early boyhood. His father was principal of Clinton Academy, one of the first institutions of the kind established in Long Island. The old house is held very sacred by the villagers, and the ancient kitchen, with its antique fireplace, stands to-day just as it did when Payne left it for his homeless wanderings over the world. It is truly a homely home; but, no doubt, many a happy hour was passed in the family circle around the bright blaze on the hearth, the simple joys of which were well calculated to inspire one of the best-known and best-loved lyrics in our language. Let no sacrilegious hand touch the old timbers of this precious relic! In a land where memorials of the past are so few, and one, also, where simple, happy homes are so abundant, it is specially fit that we should preserve the roof which sheltered one who has expressed the memories that cling around the hearthstone in words that thrill the hearts of millions.

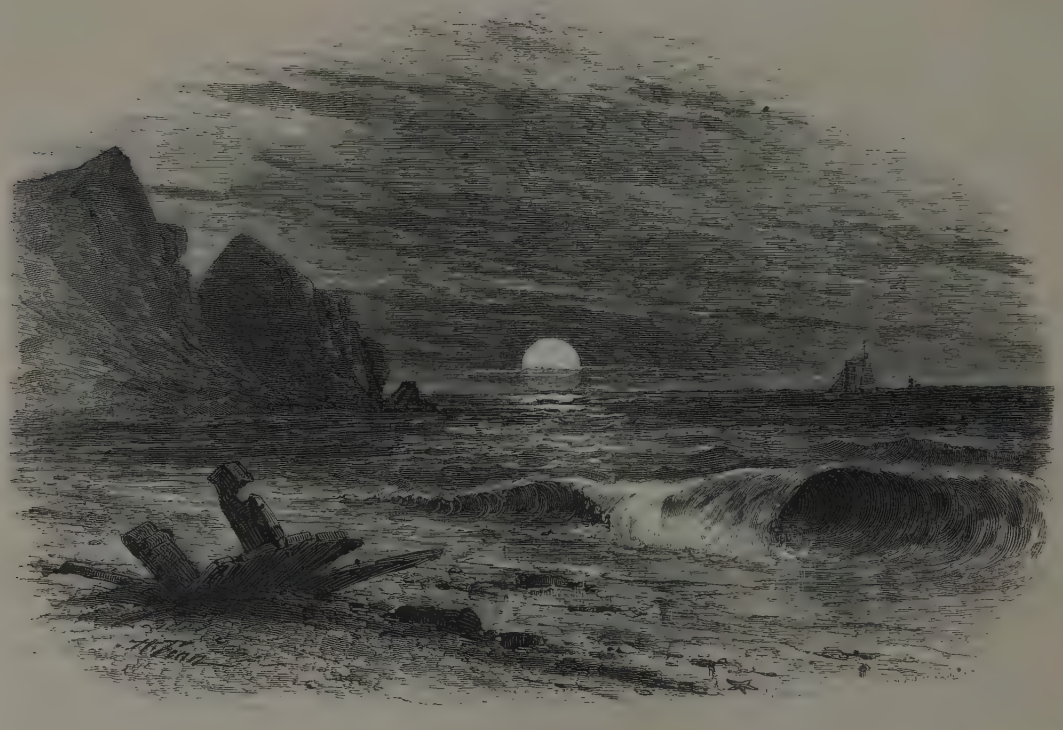
From East Hampton to the easterly extremity of Montauk Point, the peninsula possesses a peculiar charm. The road follows the sea-shore over a succession of undulating, grass-covered hills. It has been pronounced, by some admirers, the finest sea-drive in America. There is at all times and in all places a fascination in the sea-shore, whether we explore the rocky precipices of Mount Desert, or follow the sandy cliffs of Long Island. But a summer jaunt along the cliffs of Montauk Point has a charm difficult to match. The hills are like the open downs of England, and their rich grasses afford such excellent grazing that great numbers of cattle and sheep are every year driven there for pasturage. The peaceful herds upon the grassy slopes of the hills; the broken, sea-washed cliffs; the beach, with the ever-tumbling surf; the wrecks that strew the shore in pitiful reminder of terrible tragedies passed; the crisp, delicious air from the sea; the long, superb stretch of blue waters—all these make up a picture that is full both of exhilaration and of repose. The heart expands and the blood glows under the sweet, subtile stimulant of the scene, even while delicious calm and contentment fill the chambers of the mind. The interest of the scene continually varies, even while its general features are almost monotonously the same. A boat on the beach, half buried in encroaching sand; a mass of remains of wrecked vessels, such as Mr. Fenn graphically calls "The Graveyard;" a gnarled, wind-beaten tree on the hills; changing groups of cattle, among which occasionally appear drovers or herdsmen on horseback; vessels appearing and disappearing in the horizon of the sea—these make up the changes of the picture, and, simple as they are, give abundant pleasure to the wayfarer.

At last, Montauk Point is reached. This is a bold, solitary point of land, composed of sand, bowlders, and pebbles, with far stretches of sea on three of its sides. The storms here are grand, the wide Atlantic rolling in with unbroken force upon the shores. On the extreme point stands a tall, white light-house, erected in 1795, and one of the best-known lights of the coast. Mrs. Sigourney, while on a visit to the Point, in 1837, wrote the following lines:

GRIST WIND-MILLS AT EAST HAMPTON.

"'Ultima Thule' of this ancient isle,
Against whose heart the everlasting surge,
Long travelling on, and ominous of wrath,
Forever beats! Thou lift'st an eye of light
Unto the vexed and storm-tossed mariner,
Guiding him safely to his home again.
So teach us, 'mid our sorest ills, to wear
The crown of merçy, and, with changeless eye,
Look up to heaven."

Eastern Long Island is undergoing many physical changes. In reports made to the State Legislature by W. W. Mather, more than thirty years ago, we find a full and in-



Moonlight on Shore.

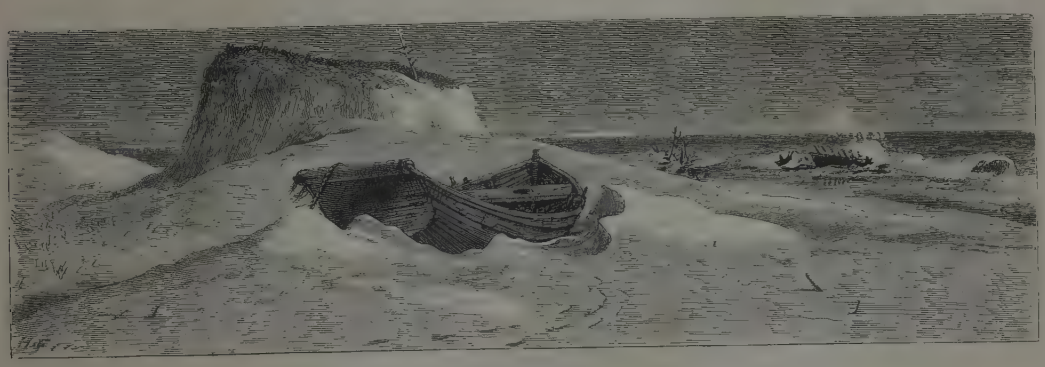
teresting description of the action of the sea on this peninsula, and also upon Orient Point. "The coast of Long Island," he says, "on the south side, from Montauk Point to Nepeague Beach, a distance of three miles, is constantly washing away by the action of the heavy surf beyond the base of the cliffs, protected only by narrow shingle beaches of a few yards or rods in width. The pebbles and bowlders of the beaches serve as a partial protection to the cliffs during ordinary tides in calm weather; but even then, by the action of the surf as it tumbles upon the shore, they are continually grinding into sand and finer materials, and swept far away by the tidal currents. During storms and high tides, the surf breaks directly against the base of the cliffs; and as they are formed

only of loose materials, as sand and clay, with a substratum of bowlders, pebbles, gravel, and loam, we can easily appreciate the destructive agency of the heavy waves, rolling in unbroken from the broad Atlantic. The destruction of land from this cause is less than one would be led to suppose, but still it is considerable. The road from Nepeague

The Downs.

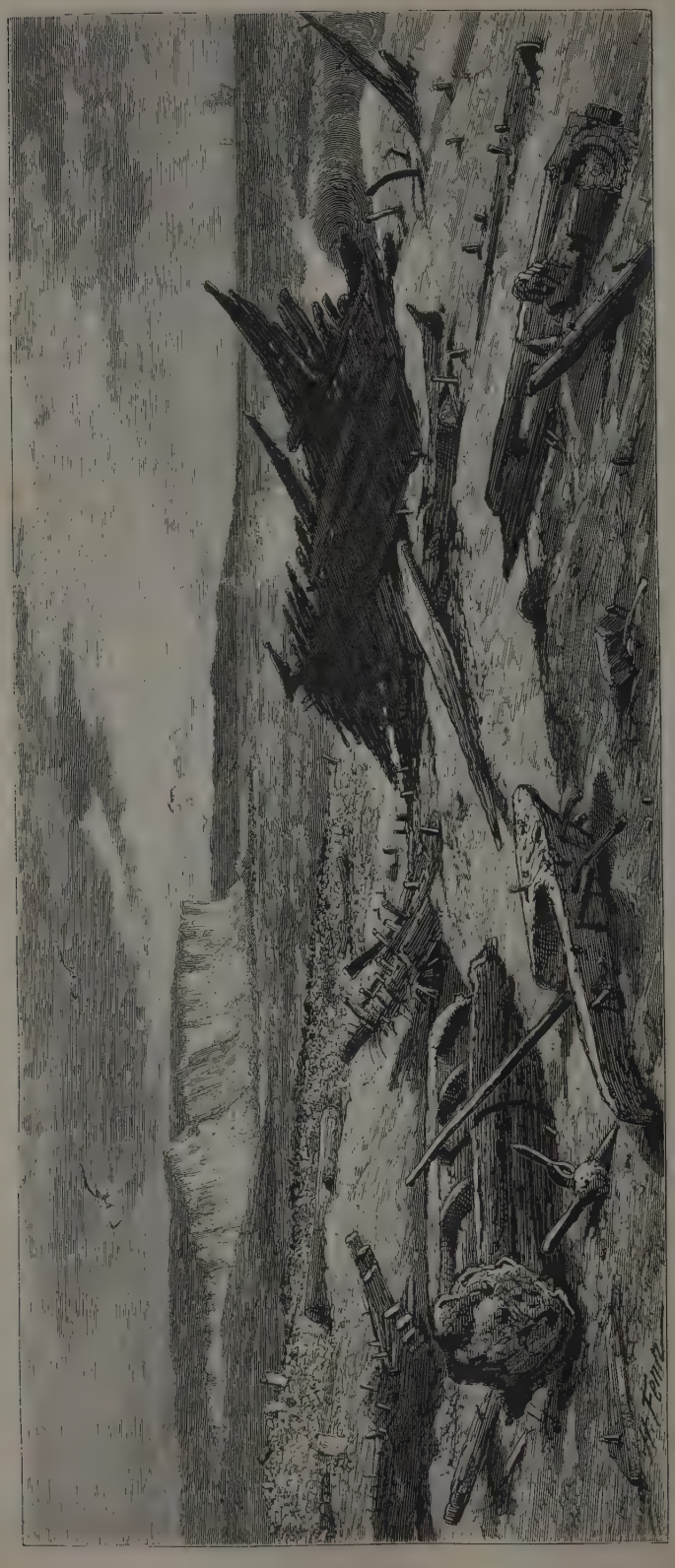
Beach to Montauk Point, which originally was some distance from the shore, has disappeared in several places by the falling of the cliffs. There are no data by which to estimate the inroads of the sea on this coast as this part of the island is held in common by an association of individuals who use it for pasturage, and it is inhabited by three herdsmen only, who are frequently changed, and who live several miles distant from each other.

"From Nepeague Beach to two miles west of Southampton, the coast is protected



The Sand-drift.

by a broad and slightly-inclined sand-beach, which breaks the force of the surf as it rolls in from the ocean. From Southampton westward, the coast of the island is protected by long, narrow islands, from one to five or six miles distant from the main island.



The Graveyard.

"The eastern parts of Gardiner's and Plumb Islands, which are composed of loose materials, are washing away in consequence of the very strong tidal currents, and the heavy sea rolling in upon their shores from the open ocean. The action upon these coasts is so rapid as to attract the attention of the inhabitants, and calculations even have been made as to the time that will probably elapse before they will have disappeared. Rocks that have formed a part of Plumb Island may now be observed, at low water, a mile or more from the present shore. Little Gull Island (to the east of Plumb Island), on which a light-house is located, was disappearing so rapidly, a few years since, that it became necessary to protect it from the further inroads of the ocean by encircling it with a strong sea-wall.

"Oyster-Pond Point is wearing away rapidly, by the combined action of the waves during heavy northeast storms, and the strong tidal current which flows with great velocity through Plumb Gut. During a

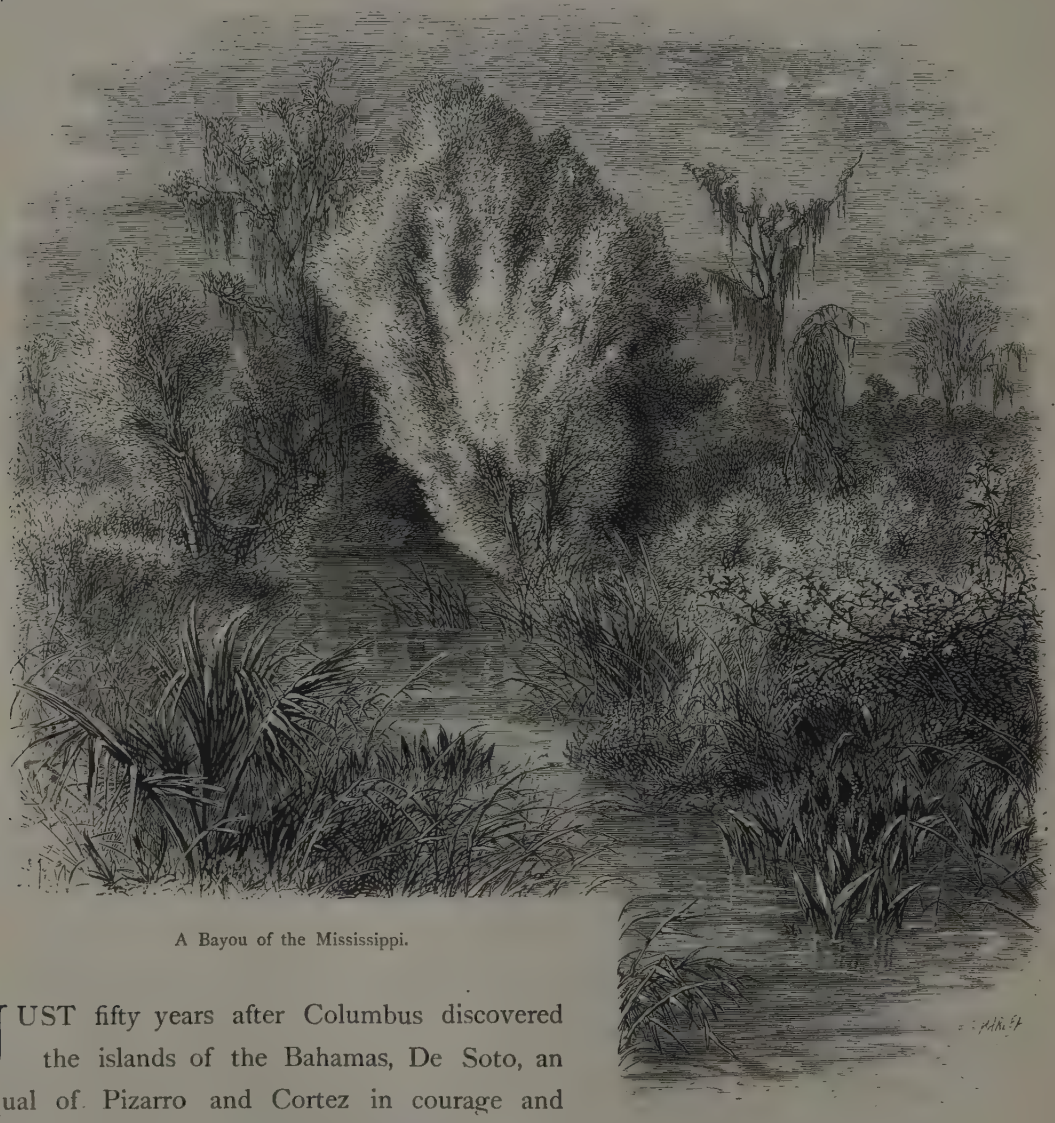
heavy storm, in 1836, the sea made a clean break over about one-quarter of a mile of the eastern part of the Point, washed away all the lighter materials, and cut a shallow channel, through which the tide now flows.

"Another effect of the sea is the formation of marine alluvion. Northeast storms bring in a heavy sea from the ocean, which, rolling obliquely along the shore, aided by powerful tidal currents, sweep the alluvia along in a westerly direction. Northwest winds do not bring in an ocean-swell, and the waves which they raise fall upon the shore in a line nearly perpendicular to the trend of the coast; so that their effect is to grind the pebbles and sand to gravel by the action of the surf, rather than to transport them coastwise. In this way outlets of small bays are frequently obstructed by bars, shoals, and spits, formed by the tidal currents sweeping past their mouths, and depositing the materials in the eddy formed by the meeting of the currents. Almost every bay and inlet, when not protected from the sea by sandy islands, have their outlets blocked up entirely by the materials deposited, or so nearly as to leave only narrow entrances."

Montauk Point.

THE LOWER MISSISSIPPI.

WITH ILLUSTRATIONS BY ALFRED R. WAUD.



A Bayou of the Mississippi.

JUST fifty years after Columbus discovered the islands of the Bahamas, De Soto, an equal of Pizarro and Cortez in courage and spirit, but not in fortune, accompanied by a broken-down and dispirited remnant of a once-powerful expedition, reached the banks of the Mississippi a thousand miles or more from its mouth. The discovery gave him a lasting fame, and furnished him a fitting grave. This river, ever-changing and yet ever the same, after more than three centuries still answers to the original description of the adventurous Spaniards, for their chief chronicler writes that "the river was so broad that if a man stood still on the other side, it could not be told whether he was a

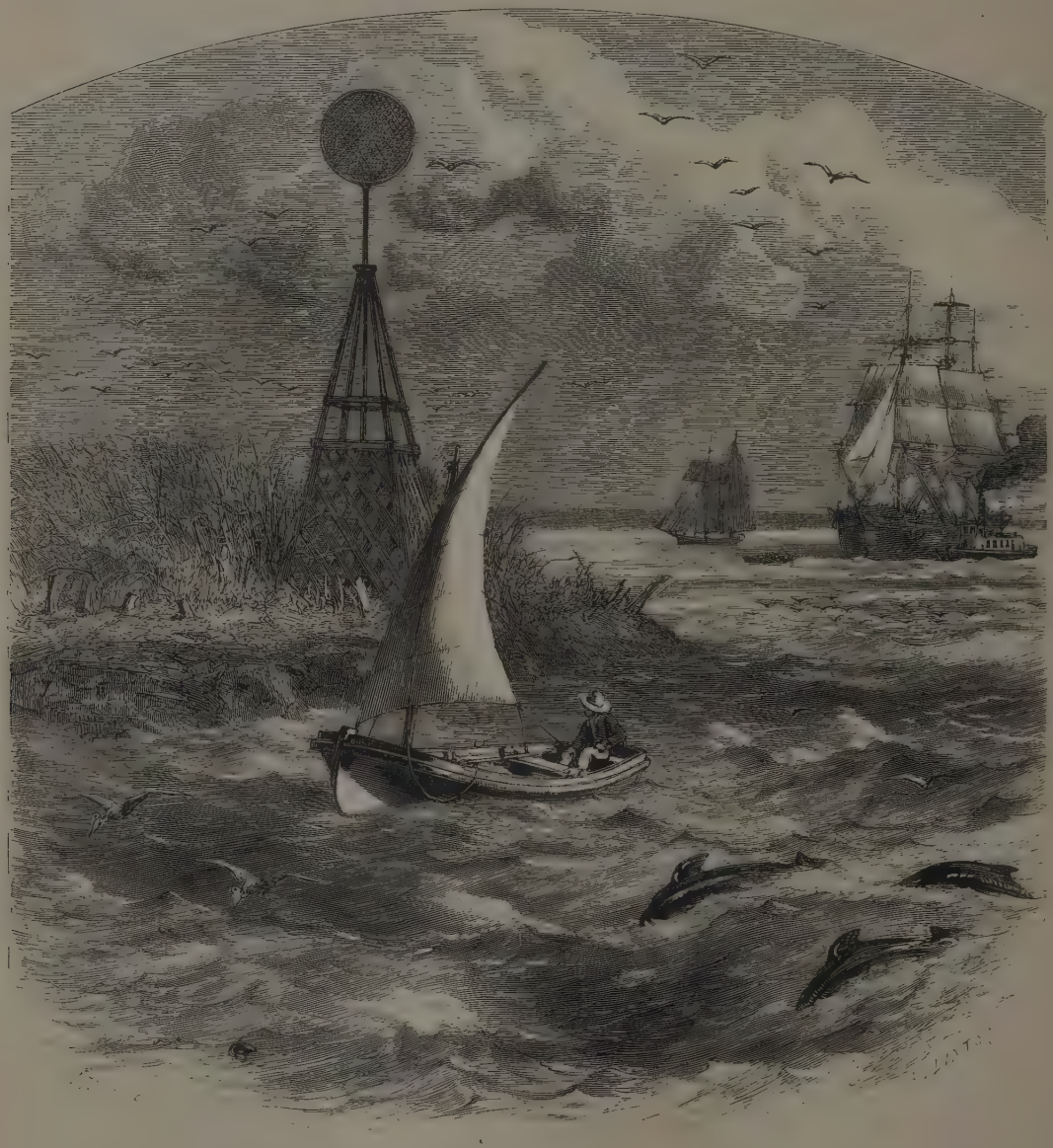
man or no. The channel," he continues, "was very deep, the current strong, the water muddy, and filled with floating trees." Luis de Moscoso, who took command of De Soto's expedition upon the decease of the great captain, gave up all ambition except to escape with his distressed followers from a country where they had met with so much misfortune, and for this purpose he finally embarked in a few rudely-built brigantines, which, left to the current, Moscoso felt assured would reach the ocean. On the route the discomfited Europeans passed what are now known as the hills of Vicksburg, the broken lands about Fort Adams, and Baton Rouge. All else on the voyage was a monotonous swamp; the banks of the river were nearly covered with water, and lined with tall cypresses, draped as if in mourning, with pendent moss. Even the low banks finally sank out of sight; the current, however, continued to flow, and Moscoso's anticipations were realized, for the brigantines finally floated in the clear green waters of the open Gulf.

More than a century elapsed after the discovery of the river before its solitude was again disturbed by the presence of the white man. During this time its mouth became involved in popular mystery. Tales were circulated that the flood of water, where the great outlet should be, was precipitated into the earth; that the story of Moscoso and his companions was a fiction; that great dragons and sullen mists guarded the vicinity from man's approach: and these tales, so harmonious with the spirit of the age, found confirmation in the traditions of the Indians, who lived thousands of miles away, on the banks of the Fox and the Illinois.

In the year 1673 Marquette, a French monk, left Quebec, traversed the great northern lakes, and reached the "Upper Mississippi" by way of the Fox and Wisconsin Rivers. Having accomplished what was then supposed to be an heroic task, he returned to Quebec, and announced that, from what he saw, he was certain the Gulf of Mexico could be reached by uninterrupted navigation. Great rejoicings ensued; the *Te Deum* was sung in all the churches; the military fired salutes, and the great "western valley," by the right of discovery, was declared to belong to France. La Salle followed, and, from the Falls of St. Anthony, made the first continuous voyage of the whole length of the river. He entered the Gulf of Mexico April 9, 1682, founded the fort of St. Louis, and gave to the adjacent lands the name of Louisiana. Returning home, he fitted out an expedition to find the mouth of the river from the sea. After coasting many weary months and establishing two forts in the vicinity, his men, incensed by his severe discipline, and hopeless from his many failures, assassinated him at the mouth of Trinity River, Galveston Bay, which he had reached in his long and fruitless search.

The mouth of the river, which thus eluded search, was discovered by Iberville eighteen years later. Instead of one vast current pouring into the Gulf, it was found to consist of numerous arms, or passes, through low swamps and islands formed by the sediment brought down by the river. This net-work of creeks, bayous, and passes, is

known as the Delta of the Mississippi. It covers an area estimated at fourteen thousand square miles, and is slowly advancing into the Gulf by the shoaling caused by the deposition of fresh sediment brought down by the river. Three of the main passes bear the practical names of Southwest, South, Northeast, and the fourth is called à l'Outre.



Southwest Pass.

The ragged and unformed arms of the "passes" are involved in what appears, even after careful examination, to be an interminable marsh. It is no wonder that La Salle consumed years in the difficult search, for there is not a place on all the extensive line of the gulf-coast that is not more suggestive of the proper mouth of a grand river

than the point where it finds an outlet. With his European experience, he naturally conceived that a stream on which he had floated more than a thousand miles, would sweep grandly into a magnificent bay. For miles before you reach the passes, you observe the muddy Mississippi water in great masses, rolling and tumbling unmingled with the briny blue sea. Gradually the dull hue assumes supremacy, and at last you are greeted by a simple object of beauty and practical interest, which has been erected by human hands. Rising up from the interminable level is a solitary light-house, built at the entrance of the Southwest Pass. This structure is the sentinel on guard—an immovable point, from the bearings of which the pilot is enabled to bring his ship to safe harbor. Just inside the Northeast Pass is a huge mud-bank, known as the Balize. Long years ago people, mostly of Spanish origin, who found it irksome to live under the restraints of settled communities, made a home at the Balize, tempted by the isolation, the abun-

A Bayou of the Mississippi.

dance of game, and the occasional reward for acting as pilots or wreckers. Within a half century the growing demands of commerce have changed the rude huts of the settlement into pleasant residences. The once-solitary homes of these waste places are enlivened by good wives and bright children. The pilots are personally inferior to none of their class; and, with beautifully-modelled boats, are ever welcome visitors to the incoming ships, which they often board far out at sea, and, if leisure permits, will not only give the news of the day, but spin a thrilling yarn of the terrible times when Lafitte, the pirate, held high revels at the Balize.

The channels of the passes, for a long time after their entrance, are only discernible to the practised eye of the pilot by what appears a regular current flowing on in the universal waste. As you ascend, if on board of a swiftly-moving steamer, you perceive that coarse grass finally appears in consecutive lines, and then crop out here and there

great lumps of mud, around which seethes and boils what now has become a rushing current. It is apparent that the sediment of the river has obtained a foothold. Steadily moving onward, the shore at last becomes defined, and water-soaked shrubs are noticeable, ever moving and fretting from the lashings of the deflecting waves. When some fifteen or twenty miles have been made, you ask, possibly, with some surprise, "Is this, indeed, the great Mississippi? when you learn that you are in one of the four entrances of the river; anon, you reach the "head of the passes," and the broad-flowing stream, in its full volume, opens to your gaze. If the day is bright and the sun well toward the

Sunset in the Mississippi Swamp.

horizon, as the swelling tide moves grandly onward, its surface glistens with the hues of brass and bronze.

Vegetation now rapidly asserts its supremacy; the low banks are covered with ferns, and here and there is an ill-shapen tree; while, landward, a dark line indicates the perfectly-developed forest.

Naught but the sameness and monotony of the river now impresses you, save the consciousness that you are borne upon a mighty, sweeping flood. Mile after mile, and still the same. The bittern screams, the wild-fowl start in upward flight; and, if night sets in, you seem to be moving through an unvaried waste. The low and scarcely-

perceptible walls of Forts Jackson and St. Philip are just discernible, when lights dancing ahead give the first signs of intelligible settlement. The "quarantine" is reached, the official visit is made, and again you commence your monotonous upward trip.

If the morning sun greets you within fifty miles of New Orleans, you find the banks of the river above the flood-tide, and evidences of permanent cultivation and happy homesteads attract the eye. Along the "coast," as the river-banks are denominated, are the "gardens," upon which the city depends for vegetable food. Then come large sugar-plantations, the dwelling-houses made imposing by their verandas, and picturesque by being half hidden in an untold variety of magnificent trees.

Thus is displayed, in the upward trip from the Balize to within twoscore miles of New Orleans, the gradual development of the banks of the Mississippi. The constant creation goes on seemingly under your own eye. From water to ooze, to mud, to soil; from grass to shrubs, to ferns, to forest-trees.

The first grand tree-development of the "swamps" is the tall and ghostly cypress. It flourishes in our semi-tropical climate of the South, being nourished by warmth, water, and the richest possible soil. The Louisiana product finds a rival in Florida; and in both places this remarkable tree is perfect in growth, often reaching the height of one hundred and thirty feet. The base of the trunk, generally covered with ooze and mud, conceals the formidable "spikes," called "knees," which spring up from the roots. These excrescences, when young, are sharp and formidable weapons, and, young or old, are nearly as hard as steel. To travel in safety through a flooded cypress-swamp on horseback, the greatest care must be taken to avoid the concealed cypress-knees; for, if your generous steed, while floundering in the soft mud, settles down upon one of them, he may never recover from the injury. The bark of the tree is spongy and fibrous; and the trunk of the tree often attains fifty or sixty feet without a branch. The foliage, as seen from below, is as soft as green silken fringe, and strangely beautiful and delicate, when contrasted with the tree itself and the gloomy, repulsive place of its nativity. The wood, though light and soft, is of extraordinary durability. It has been asserted, that cypress-trees which have been buried a thousand years under the solid but always damp earth, now retain every quality of the most perfect wood. At the root of the cypress the palmetto flourishes in vigor; and its intensely green, spear-like foliage adds to the variety of the vegetable productions in the forest solitudes.

Coming to the unsubmerged lands, which, like islands, are everywhere interspersed in this immense swamp, you meet with broad expanses on which grow the renowned "cane-brakes;" and, leaving them, you possibly come upon vistas of prairie, which, open to the constant influence of sunshine and sea-air, are dotted over with the magnificent "live-oak," the most picturesque tree of our continent. Fifty years ago the government took care of these monarchs of vegetation, depending upon their strong arms to bear our flag successfully in foreign seas; but iron and steam have combined to make more formidable

Cypress-Swamp.

defences, and the live-oak, as a necessity for naval architecture, is a thing of the past.

In contrast to the oak is the wonderful magnolia, a flowering giant, often reaching an altitude of ninety feet. Its form is attractive, and each particular bough has character-

istics of its own. Its leaves are large and crisp; the surface, exposed to the sun, is of a polished, dark green; while underneath it is almost as gray and velvety as the mullein. When the ever-green foliage of the live-oaks is trembling and whispering in the slightest breeze, or waving in great swaths in the rushing wind, the magnolia stands firm and unmoved—a beauty too full of starch to bend. But it makes amends. Its large imperial blossoms of pure white look like great ivory eggs, enveloped in green and brown. When the petals finally open, you have that bridal gift, the orange-blossom, enlarged to a span in diameter, and so fragrant that it oppresses the senses. The magnolia-tree, in full blossom, with the Spanish moss enshrouding it in a gray, neutral haze, makes a superb picture.

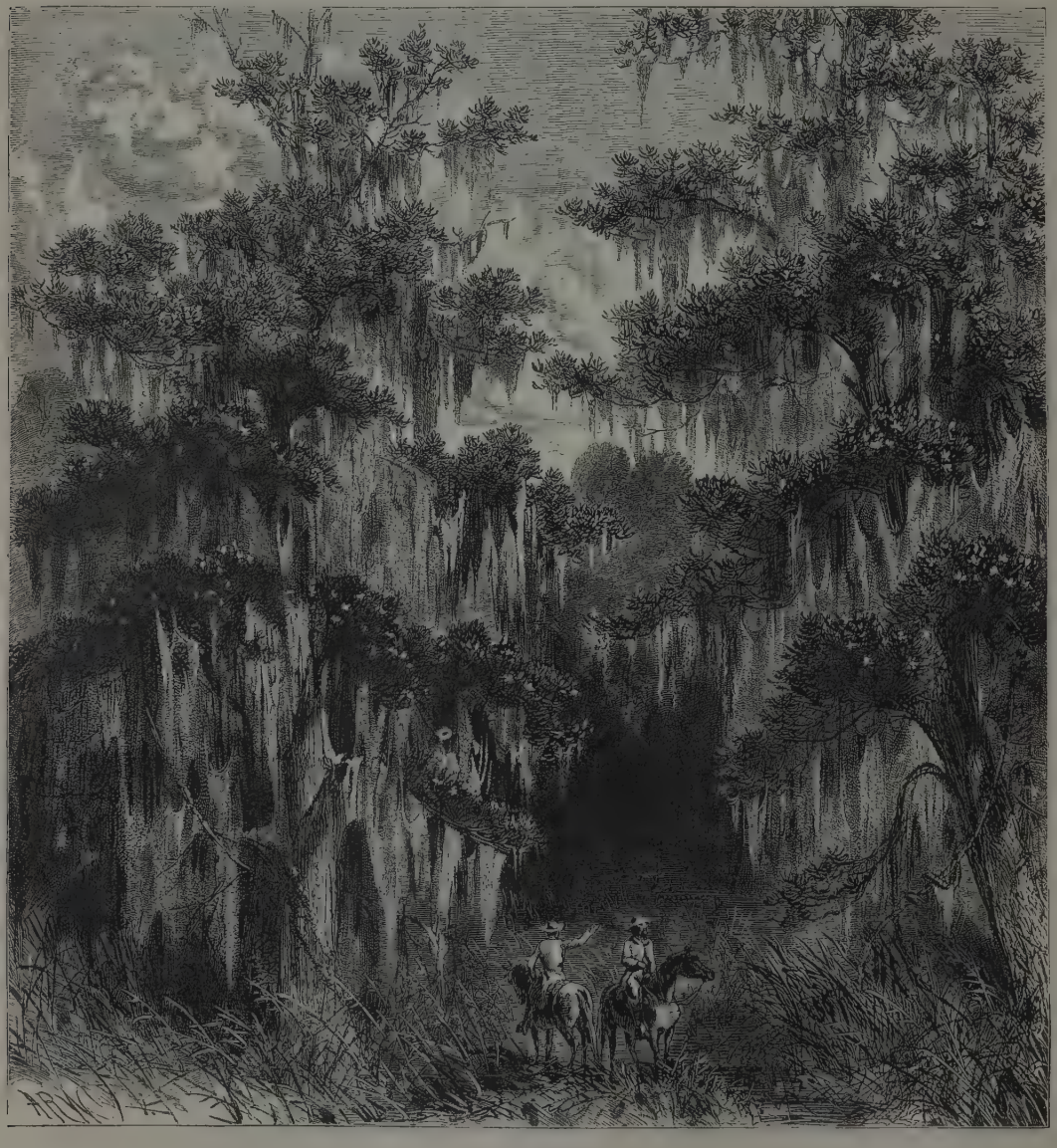
The scenery of the undisturbed forests of the Lower Mississippi is of a mysterious interest. Destitute though it be of the charms of mountains and water-falls, with no distant views, no great comprehensive exhibitions, it nevertheless inspires a sort of awe which it is difficult to define or account for. All objects are upon a water-level; and, when you look aloft through the gloom of the towering trees, you feel as if you were in a well, and below the usual surface of the earth, and that the place is born of the overflowing waters.

The grape-vines which festoon the trees curl round their supports with the force of cordage, and their trunks, slimy and grim, spring from the ground, and, writhing upward, like great pythons, grasp a supporting limb sixty feet in the air. The shimmer of distant lagoons greets you in the distance, and there are water-marks on the trees twenty feet above your head. If you look into the standing pools, you will find the surrounding earth as black as tar, and free from grass. The water is yellow with the sap of decaying vegetation, and the effluvia chill the heart.

If some passing storm has made a "window" and let in the sunshine, the undergrowth, heretofore stunted or entirely repressed by the shade, now starts into life, and seems to rejoice in new-born luxuriance. The bright colors are metallic in intensity. The flower of the scarlet lobelia trembles and flashes as if a living coal of fire. The hydrangea, a modest shrub in the North, becomes a tree, a very mound of delicate blue flowers.

A deep and lasting impression was made upon the early discoverers of the Mississippi by the drapery which festooned the trees, and which is generally known as Spanish moss. It is probable that Moscoso and his companions, when floating disconsolate and heart-broken toward the Gulf, looked upon this strange vegetable production as mourning drapery for the losses and disappointments of the expedition, and in sorrow for the death of their departed chieftain. This moss is a parasite that lives by inserting its delicate suckers under the bark, and draws its sustenance from the flowing sap. It is repelled by trees in perfect vigor, but in one enfeebled by age or accident the moss gains foothold, and goes on with its quiet work of destruction until, vampire-like, it consumes the heart's-blood of its helpless victim, and then enwraps it in a weird wind-

ing-sheet. Except from practical observation, it is difficult to comprehend the quantity of this parasite which will sometimes gather on even one tree; and, startling as may be the assertion, we have seen great streamers, sixty feet in length, gracefully descending from the topmost branches to the ground. We have known many trees apparently



Magnolia Swamp.

stricken with age, which, artificially relieved of this burden, have revived and assumed almost their natural vigor. In the great order of Nature, the moss has its purposes. It consumes the hard and iron-like woods which would otherwise for long years, a century perhaps, be a vegetable wreck, and thus quietly and surely makes way for a new growth.

This Spanish moss has been, with some truth, likened to the shattered sails of a ship torn into shreds by the storm, but still hanging to the rigging. To Châteaubriand it suggested ghosts, but no perfect idea can be obtained by comparison; it is essentially peculiar in its aspect.

Comparatively within a few years, the Spanish moss has become important as an article of commerce, for, when plucked from the trees, from which it is easily separated, and then thoroughly "cured" and threshed of its delicate integuments of bark and leaves, it is found that through the long, thready moss is a delicate fibre as black as jet, and almost as thick as horsehair, which it strikingly resembles. For the stuffing of mattresses and cushions it is valuable, and the increasing demand for it has already opened a new field of enterprise among the denizens of the swamps.

Bienville, the first governor of Louisiana, is represented as laying the foundation of New Orleans on the first available high land he met with in ascending the river. Below the city there are now, along the banks, nearly fifty miles of continuous cultivation, and this arable land is the result of the accretions of the hundred and fifty years which have passed since the city was founded. As you ascend the river, evidences multiply that you are approaching the great Southern metropolis. A hundred columns of smoke are seen when you look across the land known as the "English turn." Large fleets of sailing-vessels in tow pass on their way to the ocean. Nondescript craft of all kinds line the shores; at last the "Crescent City" appears, stretching miles away along the coast, and opening wide its enfolding arms as a welcome to the arriving stranger.

The river opposite the city is more than a mile and a half in width, and, notwithstanding the velocity of its movement, and the distance from the sea (one hundred and eight miles), the tide regularly ebbs and flows, modifying somewhat the sweep of the downward current. Here we have a magnificent bay, grand in dimensions as any arm of the sea. The city extends along the eastern bank as far as the eye can reach; the western side is dotted over with villages, highly-cultivated farms, and great workshops. A consecutive mile or more of steamers is in sight, including the magnificent "floating palaces," which "carry" between the "great cities of the West," down through every conceivable representative graduation to the absurd "stern-wheeler," which works its way up the shallower streams and "damp places," tributary to the Arkansas and Red Rivers. Ships of stately proportions from every land lie side by side, their masts and cordage revealing in rich confusion a leafless forest. The ferry-boats are constantly in motion, while the great steam-tugs, bringing up with ease a fleet of sailing-vessels from the mouth of the river, make the lowlands echo with their high-pressure puffing, and send great clouds of bituminous smoke from their chimneys, which, borne away to the upper current of the air, extend along the low horizon in miles of serpentine forms.

Reaching the shore, you find that the "Levee," which below was a narrow embank-

THE MOSS-GATHERERS.

ment, is now a wide, artificial plateau, extending miles each way, and crowded with the teeming productions of the counties and States which lie on the tributary streams of the great river. A Babel of tongues is heard among the human toilers, who with the keenest industry pursue their different avocations. You realize that you are in a great city, and at the foot of a vast and surpassable inland navigation.

To float down the Western rivers was as easy as healthy respiration; to stem the swift current on the upward trip was a task of almost superhuman labor. If artificial means had not come to the rescue, much of the great West which to-day is enriched by cities and towns, and teeming with intelligent populations, would have remained a primitive wilderness. Before the application of steam for the propulsion of water-craft, commerce was carried on by means of "broad-horns" and "keel-boats." The broad-horn accomplished its purpose when, floating down the current, it arrived at its place of destination and delivered its cargo. The keel-boat not only brought down a cargo, but, loaded with foreign products, was "cordelled" by months of hard work up the river to its original starting-point. The keel-boatmen of the Mississippi were a remarkable race of men. In strength they were absolute giants; in power of sustaining fatigue, without rivals in any age. If they had been classical in the expressions of their exultation of physical power, they would confidently have challenged Hercules to combat, and, in our opinion, would have conquered that old Greek. The keel-boatmen are gone; the strong arms of iron, impelled by fire and steam, now more perfectly do what was once their gigantic work. But the broad-horn still exists in the cumbrous flat-boat, the only craft Mike Fink and his companions would recognize. And they will be seen probably for all time in the harbor of New Orleans, bearing to the great distributing markets of the world the agricultural products of our Western States. These huge edifices are really built upon large scows, sometimes a hundred feet or more in length, the superstructure a great, oblong, square building. A good specimen flat-boat, with a full load, is literally a whole block of country-stores afloat. Intended only for the temporary purpose of floating down the current with the spring-tide, they need no architectural adornments, no quality of beauty, nothing but the virtue of strength. To keep them off the "snags" and "sawyers," they are furnished with four immense "sweeps," which are sometimes, in moments of danger, worked with a power by the flat-boatmen that shows somewhat of the spirit of the mighty men they so imperfectly represent. The flat having reached its place of destination, and been safely discharged of its valuable cargo, its mission as an argosy is ended. Now, by transmutation, to meet the further demands of commerce, it is consigned to the tender mercies of the saw and axe, and converted into cord-wood.

A favorably-situated series of plantations, with land more than ordinarily high, and therefore comparatively free from overflow, in the course of long years of cultivation becomes the centre of charming landscape scenery, which combines the novelty of many exotics growing side by side with the best-preserved specimens of the original forest.

THE MISSISSIPPI AT NEW ORLEANS.

On these old plantations, modified by climate, are developed in the greatest perfection some of the choicest tropical plants. Orange-trees may be met with which are three-quarters of a century old, with great, gnarled trunks and strong arms, still bearing in perfection their delicious fruit. The sugar-cane, usually a tender, sensitive plant, has become acclimated, and, though still a biennial, repays most liberally for its cultivation. The magnificent banana, with its great, sweeping leaves of emerald green waving in the breeze with the dignity of a banner, has within a comparatively few years almost overcome its susceptibility to cold, and is now successfully cultivated.

In the rear of the garden you find the elm-shaped pecan, of immense height and beautiful proportions, bearing abundantly an oval-shaped, thin-shelled fruit, possessing all the sweetness of the hickory-nut and almond combined. As you go farther south, below the Louisiana coast, these trees form forests, and yield to their possessors princely incomes. Hedges of jasmine lead up to the door-ways of the planters' residences, and vie in fragrance with the flowing pomegranate and night-blooming cereus, and an endless variety of the queenly family of the rose. And just where the cultivated line disappears, and the natural swamp begins, will often be found the yellow jasmine climbing up some blasted tree, and usurping its dead branches for its own uses, and covering it over with a canopy of blossoms which shed a fragrance that, in descending, is palpable to the touch and oppressive to the nostrils. Here the honey-bee revels, and the humming-bird, glancing in the sunlight as if made of living sapphires, dashes to and fro with lightning rapidity, shaking from its tiny, quivering wings the golden pollen.

At nightfall, when the warm spring-day has disappeared, to be followed by the cool sea-breeze, and the atmosphere predisposes to lassitude and dreamy repose, the minstrel of the Southern landscape, the wonderful mocking-bird, will find a commanding perch near the house, where he can enjoy the fragrance of flowers in the sea-cooled air, and know that his human admirers are listening, and he will then carol forth songs of praise and admiration, of joy and humor, of sweet strains and discords, like a very "Puck of the woods," a marvel of music and song.

The settlers who first gained foothold were of French origin, and the original impress is still maintained. Up to within a very few years communities existed in Louisiana of the most charming rural population: the little chapel, with its social French priest; the men temperate and of good bearing, because the genial climate called for moderate labor; the women bright, fond of home, and inheriting a natural taste for dress worthy of the mother-country. Unprovided with the theatre and opera, these rural populations were content in matters of display with the imposing ceremonies of their church, and for amusement with the weekly enjoyment of their extemporized balls. Among this population originally were many scions of the best families of France, whose historic names are still preserved, who shed over their simple settlements in the far-off wilds of the Mississippi something of the style pertaining to the villa and *château*. In

course of time many of these old mansions along the river have disappeared, or, falling into the possession of the irreverent Anglo-Saxon, have had their outward faces buried under broadly-constructed verandas and galleries—nice places for shade and promenade, but sadly incongruous, and painfully expressive of a "sudden growth."

The Mississippi, left to itself for hundreds of miles above its mouth in the spring-floods, would overflow its banks from two to three feet. To obviate such a catastrophe, there has been built by the enterprising planters a continuous line of levee, or earth-intrenchments, upon which slight barrier depends the material wealth of the people. The alluvium, or sediment, of the river, which is deposited most abundantly upon its

Market-Garden on the Coast.

banks, makes the frontage the highest surface, and, as you go inland, you unconsciously but steadily descend, at least four feet to the mile, until you often find the water-level marked on the trees at times of overflow far above your head. When the spring-flood is at its height, a person standing inside of the levee has the water running above him, and, if he glances at the houses in the rear, the level of the flood will possibly reach the height of the second-story windows.

For nine months of the year the Louisiana planter pays but little attention to the levee, but, when the spring comes, and the melted snows, which fall even as far off as the foot of the Rocky Mountains, find their way past his residence to the sea, he is suddenly awakened to the most intense anxiety; and when, at last, the great flood of

water—the drainage, in fact, of two-thirds of the lands of the centre of the continent—dashes over the frail embankment of the levee—he realizes what a slender hold he has upon his young crop and the earthy improvements of a large estate. The rains at these times assist in making the water-soaked barrier unstable; rats, mice, and beetles, have their burrows, and thousands of crawfish, with their claws as hard and sharp as a chisel of iron, riddle the levee with holes. Under these critical conditions, even a light wind may invite the impending catastrophe. In an unexpected moment the alarm is given that a "crevasse" is threatened! All is confusion and consternation. The cry of

Planter's House on the Mississippi.

fire at midnight in a crowded city is not more terrible. The plantation-bells are rung, the news is carried to out-of-the-way places by fleet horsemen, the laboring population assemble, and, armed with such implements as are at command, the attempt is made to stay the threatening waves. The levee at the point of assault, in spite of all action to the contrary, moves from its foundation and crumbles away, and the river, raised to an artificial height, now finds relief in a current that roars like a cataract. If the break is of formidable proportions, the passing flat-boat is drawn into the vortex, and sent like a chip high and dry into the distant fields. Even the great Western steamer that

breasts so grandly the downward current of the river, in the newly-formed rapids trembles and swerves from its course. Occasionally a crevasse is arrested by the erection of coffer-dams, by piles driven in the earth, which make the support for branches of trees or the broadside of a flat-boat; but, as a rule, these ill-directed labors are fruitless, and the sweeping current is left to take its course. The lowlands in the rear of the river-front are soon filled, and the current, at last finding a level with the river itself, converts the surrounding country for miles into a waste of waters.

Added to the danger of overflow is that of caving banks. By a natural law in the formation of the banks of the Mississippi, the alluvium is rapidly deposited upon

A "Crevasse" on the Mississippi.

the "points," and dissolves away from the "bends." It is not an extraordinary sight to see a grandly-constructed and ancient house hanging outside the levee and over the edge of the river-bank, destined sooner or later to drop into the river. You will find these things occur where the mighty current, sweeping round a bend, has worn away the soft earth, often dissolving it by acres. If this occurs in front of a plantation, the house and improvements, perhaps originally a mile from the river, will be gradually brought to the edge of the bank, to be finally engulfed. The point directly opposite the bend, however, makes, in accretions, exactly what is taken away from the opposite side of the river.

MACKINAC.

WITH ILLUSTRATIONS BY J. DOUGLAS WOODWARD.

Arched Rock.

TRAVELLING westward over the great lakes, we constantly encounter beginnings. The newness of the new world is conspicuous, pleasantly or obtrusively, according to our tastes, but conspicuous always. The cities on the shores are young and precocious, the villages are young and awkward, and the lumber-sta-

tions are young and green with the freshly-cut verdure of the forest. The universal boast on the fresh-water seas is, "See how young we are!"

You enter a city of one hundred thousand inhabitants. "Twenty years ago, sir, this was an unbroken wilderness," observes the citizen, as he takes you through the busy streets in his luxurious carriage. The steamer stops at a thriving town of ten thousand people. "Five years ago there wasn't so much as a shanty here," says the hotel-keeper, with a flourishing wave of his hand toward the clustering houses and his four-story frame caravansary, decked out in shining green and white. Early, some bright morning, a landing is made at a wood-station; a long wharf, a group of unpainted

View of Fort and Town.

houses, a store, and several saw-mills, compose a promising settlement. "Six months ago, mister, there war'n't even a chip on this yer spot," says a bearded giant, sitting on a wood-pile, watching the passengers as they come ashore.

Coming from the east and striking the lakes at Buffalo, the elderly traveller begins to breathe this juvenile atmosphere of the fresh water; and, as he advances westward, he is obliged to abandon, one by one, his cherished beliefs and interests. History there is none, relics there are none, and the oldest inhabitant seems to him but a boy. At first he wonders and admires, with a strange, new scorn for the quiet ocean-village where his home is fixed, but gradually he grows weary of the hurry, weary of the paint, weary of unfinished cities and just-begun villages, weary of ambitious words and daring hopes.

Arched Rock by Moonlight.

weary, in short, of the soaring American eagle. In this mood, after gloomily surveying Duncan and Sheboygan, on the Michigan shore, the elderly traveller, still weary with the new, is suddenly brought face to face with the old; for in the straits between Lakes Huron and Michigan, round the corner of Bois-Blanc and past the shoals of Round

Point, lies the ancient home of the Giant Fairies, the little picturesque island of Mackinac, venerable with the memories of more than two centuries.

There is nothing young about Mackinac, nothing new. The village, at the foot of the cliff, is decayed and antiquated; the fort, on the height above, is white and crumbling with age; the very flag is tattered; and, once beyond this fringe of habitations around the port, there is no trace of the white man on the island save one farm-house of the last century, and a ruin on the western shore. There is no commercial activity at Mackinac; the business life of the village died out with the fur-trade; and so different is its aspect from that of the other lake-towns, no matter how small, that the traveller feels as though he was walking through the streets of a New-World Pompeii.

There is no excitement in Mackinac, no news. In summer, if Huron is willing, the Sarnia boats bring the mails three times a week; but Saginaw Bay is often surly; blustering head-winds lie in wait behind Thunder-Bay Islands, and days pass without a letter or paper. In winter the mails are carried over the ice on dog-trains, travelling northward along the shores of Lake Huron, and striking across the straits—pictures of arctic life as real as any in the polar regions. But even this means of communication is necessarily precarious, and spy-glasses from the fort often sweep the horizon for weeks, searching in vain for the welcome black speck in the white distance. Thus isolated in the northern waters, the island does not enjoy that vivid interest in passing events which this age of steam and electricity has evoked; neither politics, epidemics, improvements, nor religion, disturb its lethargy. Religion has lain dormant where the first missionaries left it; the air is so pure that no one dies under the extreme limit of the term allotted to man; no improvements have been made in a hundred years; and, as to politics, if the islanders do not persist, like the Pennsylvania Dutchmen, in voting for General Jackson, it is simply because they have only got as far down the list as Madison.

The history of Mackinac (Mackinac, or Mackinaw, is an abbreviation of the full title of Michilimackinac, which, according to Lippincott's "Gazetteer," should be pronounced *Mish-il-e-mak'e-naw*) may be divided into three periods—the explorer's, the military, and the fur-trading. The first period embraces the early voyages of Father Marquette; his college for the education of Indian youths, established on the straits in 1671; the death of the explorer, and the remarkable funeral procession of canoes, which, two years afterward, brought back his body, from its first burial-place on Lake Michigan, to the little mission on the Straits of Mackinac, which in life he loved so well. Here, in 1677, his grave was made by his Indian converts; its exact site was lost during the warfare that followed, but it was in the neighborhood of the little church whose foundation remains still visible, and here it is proposed to erect a monument to his memory.

In 1679 the daring explorer, Robert Cavalier de la Salle, sailed through the straits on his way to the Mississippi, in a vessel of sixty tons, called the Griffin, built by himself, on Lake Erie, during the previous spring. He stopped at old Mackinac, on the

main-land; and Hennepin, the historian of the expedition, describes the astonishment of the Indians on seeing the Griffin, the first vessel that passed through the beautiful straits.

In 1688 a French officer, Baron la Houtan, visited the straits, and in his journal

Chimney Rock.

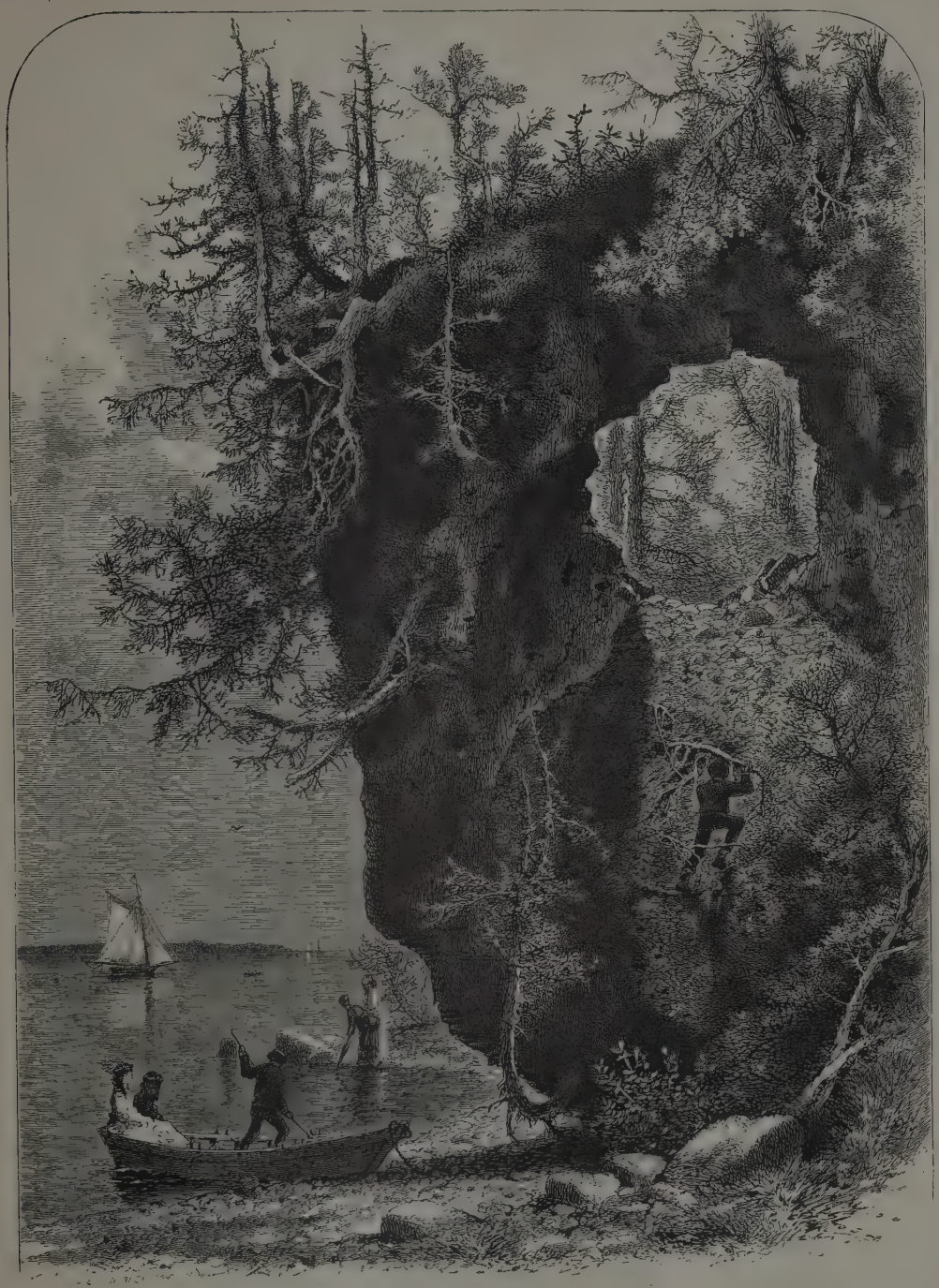
makes the first mention of the fur-trade: "The *courriers de bois* have a settlement here, this being the depot for the goods obtained from the south and west savages, for they cannot avoid passing this way when they go to the seats of the Illinese and the Oumamis, and to the river of Mississippi."

In 1695 the military period begins. At that date M. de la Motte Cadillac, who afterward founded the present city of Detroit, established a small fort on the straits. Then came contests and skirmishes, not unmingled with massacres (for the Indians were enlisted on both sides), and finally the post of Mackinac, together with all the French strongholds on the lakes, was surrendered to the English, in September, 1761.

In 1763 began the conspiracy of Pontiac, wonderful for the sagacity with which it was planned and the vigor with which it was executed. Pontiac, the most remarkable Indian of all the lake-tribes, lived on Pêché Island, near Lake St. Clair. He was a firm friend of the French, and, to aid their cause, he arranged a simultaneous attack upon all the English forts in the lake-country, nine out of twelve being taken by surprise and destroyed, and among them the little post on the Straits of Mackinac. For a year after the massacre no soldiers were seen in these regions; but, a treaty of peace having been made with the Indians, troops were again sent west to raise the English flag in its old position.

During the War for Independence the fort was established in its present site on Mackinac Island; and the stars and stripes, superseding the cross of St. George and the lilies of the Bourbons, waved for a time peacefully over the heights; but the War of 1812 began, and the small American garrison was surprised and captured by the British, under Captain Robarts, who, having landed at the point still known as the "British Landing," marched across the island to the gate of the fort and forced a surrender. After the victory of Commodore Perry, on Lake Erie, in 1813, it was determined to recapture Fort Mackinac from the British, and a little fleet was sent from Detroit for that purpose. After wandering in the persistent fogs of Lake Huron, the vessels reached the straits, and a brisk engagement began in the channel, between Round Island and Mackinac. At length the American commander decided to try a land attack, and forces were sent on shore, under command of Colonel Croghan and Major Holmes. They landed at the "British Landing," and had begun to cross the island when the British and Indians met them, and a desperate battle ensued in the clearing near the Dousman farm-house. The enemy had the advantage of position and numbers, and, aided by their innumerable Indian allies, they succeeded in defeating the gallant little band, who retreated to the "Landing," leaving a number killed on the field, among them Major Holmes. The American fleet cruised around the island for some time, but "the stars in their courses fought against Sisera."

As far back as 1671, Marquette had noticed and described the currents of air that disturb the navigation of the straits, in the following quaint terms: "The winds: for this is the central point between the three great lakes which surround it, and which seem incessantly tossing ball at each other. For no sooner has the wind ceased blowing from Lake Michigan, than Lake Huron hurls back the gale it has received; and Lake Superior, in its turn, sends forth its blasts from another quarter; and thus the game is con-



Fairy Arch.

stantly played from one to the other." The clumsy vessels could do nothing against the winds and waves; and not until the conclusion of peace, in 1814, was the American flag again hoisted over the Gibraltar of the lakes.

Points on the Straits of Mackinac began to be stations for the fur-trade as early as

1688, but the constant warfare of the military period interfered with the business. In 1809 John Jacob Astor bought out the existing associations, and organized the American Fur Company, with a capital of two millions. For forty years this company monopolized the fur-trade, and Mackinac was the gayest and busiest post in the chain—the great central mart. Here were the supply-stores for the outgoing and incoming *voyageurs*, and the warehouses for the goods brought from New York, as well as for the furs from the interior. From here started the *bateaux* on their long journey to the Northwest, and here, once or twice a year, came the returned *voyageurs*, spending their gains in a day, with the gay prodigality of their race, laughing, singing, and dancing with the pretty half-breed girls, and then away into the wilderness again. The old buildings of the Fur Company form a large portion of the present village of Mackinac. The warehouses are

Sugar-Loaf Rock—(East Side).

Sugar-Loaf Rock—(West Side).

for the most part, unused, although portions of some of them are occupied as stores. The present McLeod House, an hotel on the north street, was originally erected as a boarding-house for the company's clerks, in 1809. These were Mackinac's palmy days; her two little streets were crowded with people, and her warehouses filled with merchandise. All the traffic of the company centred here, and its demands necessitated the presence of men of energy and enterprise, some of the oldest and best business-men of the Eastern cities having served an apprenticeship in the little French village under the cliff. Here, also, were made the annual Indian payments, when the neighboring tribes assembled by thousands on the island to receive their stipend.

The natural scenery of Mackinac is charming. The geologist finds mysteries in the masses of calcareous rock dipping at unexpected angles; the antiquarian feasts his eyes

on the Druidical circles of ancient stones; the invalid sits on the cliff's edge, in the vivid sunshine, and breathes in the buoyant air with delight, or rides slowly over the old military roads, with the spicery of cedars and juniper alternating with the fresh forest-odors of young maples and beeches. The haunted birches abound, and on the crags grow the weird larches, beckoning with their long fingers—the most human tree of all. Bluebells, on their hair-like stems, swing from the rocks, fading at a touch, and in the deep woods

Lovers' Leap.

are the Indian pipes, but the ordinary wild-flowers are not to be found. Over toward the British Landing stand the Gothic spires of the blue-green spruces, and now and then an Indian trail crosses the road, worn deep by the feet of the red-men, when the Fairy Island was their favorite and sacred resort.

The Arch Rock, one of the curiosities of Mackinac, is a natural bridge, one hundred and forty-five feet high by less than three feet wide, spanning the chasm with airy grace. This arch has been excavated by the action of the weather on a projecting angle

of the limestone cliff. The beds forming the summit of the arch are cut off from direct connection with the main rock by a narrow gorge of no great depth. The portion supporting the arch on the north side, and the curve of the arch itself, are comparatively fragile, and cannot long resist the action of rains and frosts, which in this latitude, and on a rock thus constituted, produce great ravages every season. The arch is peculiarly

"Robinson's Folly."

beautiful when silvered with the light of the moon, and hence on moonlight nights strangers on the island always visit it.

Fairy Arch is of similar formation to Arch Rock, and lifts from the sands with a grace and beauty that justify the name bestowed upon it.

The Sugar-Loaf is a conical rock, one hundred and thirty-four feet high, standing alone in hoary majesty in the midst of a grassy plain.

The Lovers' Leap, on the western shore, is two hundred feet high, rising from the lake like a rocky column, and separated from the adjoining bank by a deep chasm. The legend, as usual, is of an Indian squaw, who, standing on the rock, waiting and watching for the return of her lover from battle, saw the warriors bringing his dead body to the island, and in her grief threw herself into the lake. But, as a bright spirit once observed, "One gets tired of thinking of all the girls who have leaped!" and enthusiasm flags over a heroine whose name is Me-che-ne-mock-e-nung-o-ne-qua!

The cliff called "Robinson's Folly" has its legend also. This time it was a young officer who went over; indeed, there may have been half a dozen of them, for the Folly was a summer-house where cigars and wine helped to pass away the long summer days, and when at last the rock crumbled and carried them over, Robinson's folly was complete, and is still remembered, although it was finished more than a hundred years ago.

Old Fort Holmes, on the highest point of the island, was built by the British in 1812. It was then named Fort George, but, after the Americans took possession of Mackinac, it was renamed after the gallant Major Holmes, who was killed in the battle on Dousman's farm the preceding year. The ruins are still to be seen, and the surveyor's station on the summit is a favorite resort for summer visitors, as the view of the straits is superb.

The present Fort Mackinac was built by the British about a century ago. It stands on the cliff overlooking the village, and its stone-walls and block-houses present a bold front to the traveller wearied with the peaceful, level shores of the fresh-water seas. This ancient little fort has a long list of honored names among its records—veteran names of the War of 1812, well-known names of the Mexican contest, and loved, lamented names of the War for the Union. It has always been a favorite station among the Western posts, and many soldiers have looked back with loving regret as the boat carried them away from the beautiful island.

In 1823 a Protestant mission-school for Indian children was built upon the beautiful slope at the eastern end of Mackinac village. This was one of the most, if not the most, flourishing of the Indian schools in the United States, containing, at one time, two hundred scholars, Indian boys and girls gathered from all the lake-country as far west as the Red River of the North. The idea of the school originated with the Rev. Dr. Morse, father of the inventor of the telegraph, who, happening to visit the island in 1820, noticed the lawless life of the fur-traders and *voyageurs*, and the bad effect upon the half-civilized Indians. Returning to his Eastern home, he described what he had seen; public interest was awakened, money liberally contributed, and a school and church built under the care of the American Board of Commissioners for Foreign Missions. There are still persons living in the Eastern States who remember the sanguine expectations regarding this school. The beautiful island was to be evangelized, Indian children were to be Christianized, educated, and sent back to their

homes, each one a missionary bringing good tidings to the people who sat in great darkness. The *voyageurs* and traders also were to be gathered into the fold, and their half-forgotten religion revived and trained into a purer and more vigorous growth. The school prospered for fifteen years. It was a favorite mission at the East, especially in New England, and zealous teachers gave their best efforts for its success. The mission was continued until the extinction of the fur-trade, the removal of the agency, and the gradual diminution of the Indians in the vicinity reduced its opportunities for good.

The island of Mackinac was a sacred spot to the Indians of the lakes. They believed it to be the home of the giant fairies, and never passed its shores without stopping to offer tribute to the powerful genii who guarded the straits. Even now there is a vague belief among the remnants of the tribes that these mystic beings still reside under the island, and sometimes sally forth by night from the hill below the fort.

It is not often that we can obtain a specimen of the original poetry of the Indian race before intercourse with the white man had corrupted its simplicity. Occasionally we find a fragment. Some years ago an aged Indian chieftain left his Mackinac home to visit some of his tribe in the Lake-Superior country, and, as he sat upon the deck of the steamer in the clear twilight and watched the outlines of the fairy island growing faint in the distance, the old man's heart broke forth in the following apostrophe, which a listener, struck by its beauty, translated and transcribed on the spot:

"Michilimackinac, isle of the clear, deep-water lake! how soothing it is, from amidst the smoke of my *opawgun*, to trace thy blue outlines in the distance, and to call from memory the traditions and legends of thy sacred character! How holy wast thou in the eyes of our Indian seers! How pleasant to think of the time when our fathers could see the stillness which the great Manitou shed on thy waters, and hear at evening the sound of the giant fairies, as with rapid step and giddy whirl they danced upon thy limestone battlements! Nothing then disturbed them save the chippering of birds and the rustling of the silver-barked birch. Michilimackinac, isle of the deep lake, farewell!"

Indian Hut.

OUR GREAT NATIONAL PARK.

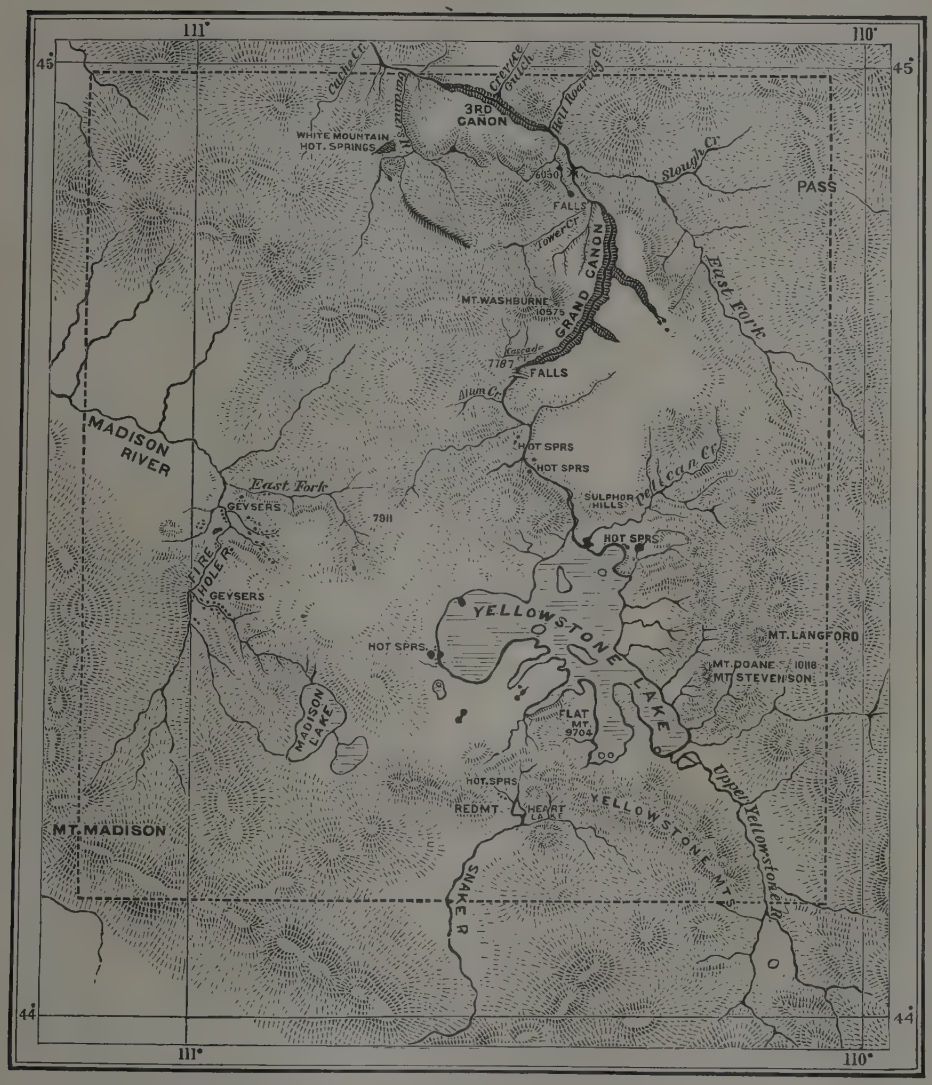
THE VALLEY OF THE YELLOWSTONE.

The Yellowstone.

THE Yellowstone River, one of the tributaries of the Missouri, has a long, devious flow of thirteen hundred miles ere it loses its waters in those of the larger stream. Its source is a noble lake, situated in Wyoming Territory, and nestling amid the snow-peaks of the highest mountain-range in the country. The upper course of the river is through immense cañons and gorges, and its flow is often marked by splendid water-falls and rapids, presenting at various points some of the most remarkable scenery in the

country. The entire region about its source is volcanic, and abounds in boiling springs, mud-volcanoes, soda-springs, sulphur-mountains, and geysers the marvels of which outdo those of Iceland.

This remarkable area has recently been set apart by Congress for a great national



Map of the Yellowstone National Park.

park. It certainly possesses striking characteristics for the purpose to which it has been devoted, exhibiting the grand and magnificent in its snow-capped mountains and dark cañons, the picturesque in its splendid water-falls and strangely-formed rocks, the beautiful in the sylvan shores of its noble lake, and the phenomenal in its geysers, hot springs, and mountains of sulphur. It may be claimed that in no other portion of the globe are there united so many surprising features—none where the conditions of beauty and con-

trast are so calculated to delight the artist, or where the phenomena are so abundant for the entertainment and instruction of the student.

It is a magnificent domain in its proportions, extending nearly sixty-five miles from north to south, and fifty-five miles from east to west. The Yellowstone Lake lies near the southeasterly corner of the park, the Yellowstone River flowing from its upper boundary, and running almost due north. The lake is twenty-two miles in length, and its average width from ten to fifteen miles. Its height above the level of the sea is seven thousand feet, while its basin is surrounded by mountains reaching an altitude of over ten thousand feet, the peaks of which are covered with perpetual snow. Numerous hot springs are found on the shores of the lake, and also along the banks of the river. About fifteen miles from its source, the river takes two distinct, precipitous leaps, known as the Upper and the Lower Falls, and beyond the falls cuts its way through an immense cañon, the vertical walls of which reach, at places, the height of fifteen hundred feet. Near the western boundary of the park, the Madison, an important tributary of the Columbia, takes its rise; and along one of the branches of this river, known as Fire-Hole River, are found numerous extraordinary geysers, some of which throw volumes of boiling water to a height exceeding two hundred feet. In the northwest corner of the park, the Gallatin, another tributary of the Columbia, takes its rise.

This wonder-land has only recently been explored. For years, marvellous stories have been rife among the hunters of the far West of a mysterious country in the heart of the Rocky Mountains, which the Indians avoided as the abode of the evil spirits, where the rumble of the earthquake is frequently heard, where great jets of steam burst through the earth, where volcanoes throw up mud instead of fire, and where a river flows through gorges of savage grandeur; but beyond these rumors, often apparently absurd exaggerations, nothing was known of that region. An exploring party, under Captain Reynolds, of the United States Engineer Corps, endeavored to enter the Yellowstone Basin in 1859, by way of the Wind-River Mountains, at the south, but failed on account of the ruggedness of the mountains and the depth of the snow. In 1870, an exploring party under General Washburn, escorted by Lieutenant Doane, of the United States Army, succeeded in entering the valley; and from this source the public obtained the first trustworthy accounts of the strange land. Immediately thereafter, an expedition, under sanction of Congress, was organized by the Secretary of the Interior, and placed in the charge of Professor F. V. Hayden, United States geologist; while, at the same time, a party under the command of Lieutenant Barlow, of the United States Engineer Corps, ascended the Yellowstone, and traversed the greater part of the area now included in the park. Professor Hayden's expedition made a thorough exploration of the whole region, and it is to his full and exhaustive report to Congress that we are indebted for an accurate detailed knowledge of the strange features of this remarkable land. It is to this gentleman, probably more than to

any other person, that we are indebted for the idea of converting the valley into a national park. The expedition, however, was organized by the Hon. Columbus Delano, Secretary of the Interior; and hence we may attribute the successful issue of the noble conception to the coöperation of the secretary with the purposes of the scientific explorers appointed by him. From the interesting pages of Professor Hayden's report we

Cañon of the Yellowstone.

mainly draw the subjoined particulars of the romantic wonders of our imperial pleasure-ground:

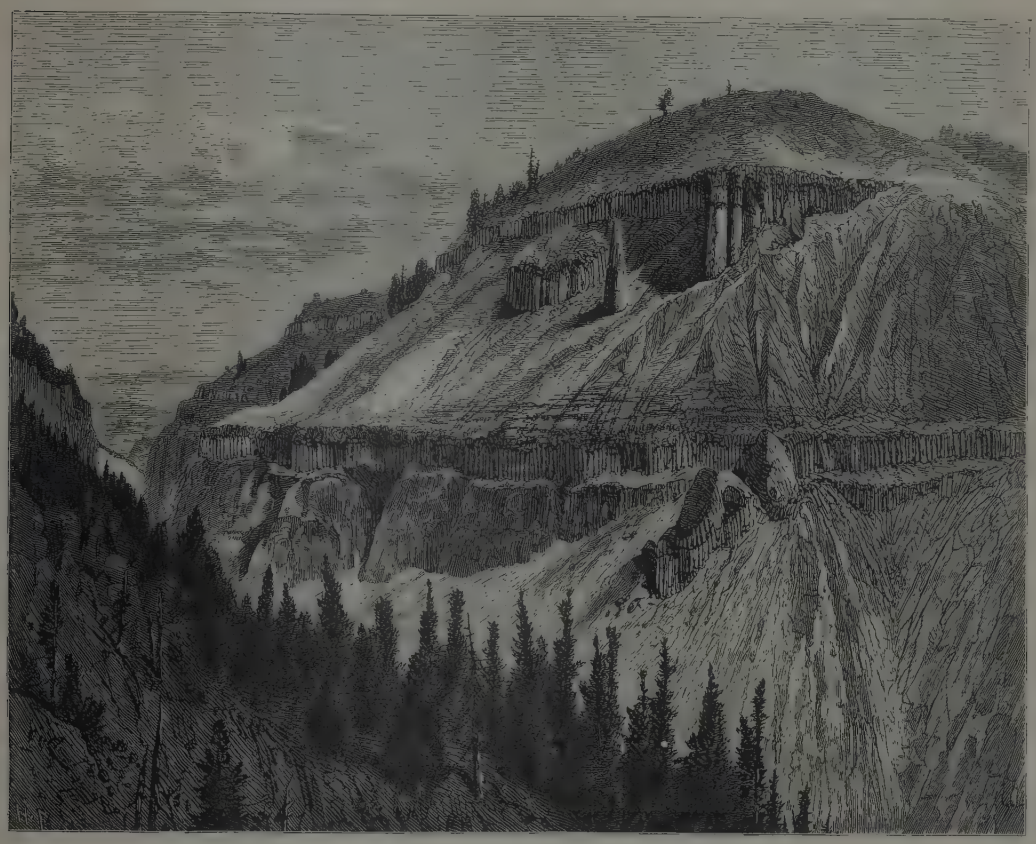
THE YELLOWSTONE BASIN.

"The Yellowstone Basin proper, in which the greater portion of the interesting scenery and wonders is located, comprises only that portion enclosed within the remark-

Gorge of the Yellowstone.

able ranges of mountains which give origin to the waters of the Yellowstone south of Mount Washburn and the Grand Cañon. The range of which Mount Washburn is a conspicuous peak seems to form the north wall, or rim, extending nearly east and west across the Yellowstone, and it is through this portion of the rim that the river has cut its channel, forming the remarkable falls and the still more wonderful cañon. The area of this basin is about forty miles in length. From the summit of Mount Washburn a bird's-eye view of the entire basin may be obtained, with the mountains surrounding it on every side, without any apparent break in the rim. This basin has been called, by some travellers, the vast crater of an ancient volcano. It is probable that during the Pliocene period the entire country drained by the sources of the Yellowstone and the Columbia was the scene of as great volcanic activity as that of any portion of the globe. It might be called one vast crater, made up of thousands of smaller volcanic vents and fissures, out of which the fluid interior of the earth, fragments of rock, and volcanic dust, were poured in

unlimited quantities. Hundreds of the nuclei or cores of these volcanic vents are now remaining, some of them rising to a height of ten thousand to eleven thousand feet above the sea. Mounts Doane, Langford, Stevenson, and more than a hundred other peaks, may be seen from any high point on either side of the basin, each of which formed a centre of effusion. Indeed, the hot springs and geysers of this region, at the present time, are nothing more than the closing stages of that wonderful period of volcanic action that began in Tertiary times. In other words, they are the escape-



Column-Rocks.

pipes or vents for those internal forces which once were so active, but are now continually dying out. The evidence is clear that, ever since the cessation of the more powerful volcanic forces, these springs have acted as the escape-pipes, but have continued to decline down to the present time, and will do so in the future, until they cease entirely."

THE FALLS AND THE GRAND CAÑON.

"But the objects of the deepest interest in this region are the falls and the Grand Cañon. I will attempt to convey some idea by a description, but it is only through

the eye that the mind can gather any thing like an adequate conception of them. As we approached the margin of the cañon, we could hear the suppressed roar of the falls, resembling distant thunder. The two falls are not more than one-fourth of a mile apart. Above the Upper Falls the Yellowstone flows through a grassy, meadow-like valley, with a calm, steady current, giving no warning, until very near the falls, that it is about to rush over a precipice one hundred and forty feet, and then, within a quarter of a mile, again to leap down a distance of three hundred and fifty feet.

"But no language can do justice to the wonderful grandeur and beauty of the cañon below the Lower Falls; the very nearly vertical walls, slightly sloping down to the water's edge on either side, so that from the summit the river appears like a thread of silver foaming over its rocky bottom; the variegated colors of the sides, yellow, red, brown, white, all intermixed and shading into each other; the Gothic columns of every form, standing out from the sides of the walls with greater variety and more striking colors than ever adorned a work of human art. The margins of the cañon on either side are beautifully fringed with pines. In some places the walls of the cañon are composed of massive basalt, so separated by the jointage as to look like irregular masonwork going to decay. Here and there, a depression in the surface of the basalt has been subsequently filled up by the more modern deposit, and the horizontal strata of sandstone can be seen. The decomposition and the colors of the rocks must have been due largely to hot water from the springs, which has percolated all through, giving to them the present variegated and unique appearance.

"Standing near the margin of the Lower Falls, and looking down the cañon, which looks like an immense chasm or cleft in the basalt, with its sides twelve hundred to fifteen hundred feet high, and decorated with the most brilliant colors that the human eye ever saw, with the rocks weathered into an almost unlimited variety of forms, with here and there a pine sending its roots into the clefts on the sides as if struggling with a sort of uncertain success to maintain an existence—the whole presents a picture that it would be difficult to surpass in Nature. Mr. Thomas Moran, a celebrated artist, and noted for his skill as a colorist, exclaimed, with a kind of regretful enthusiasm, that these beautiful tints were beyond the reach of human art. It is not the depth alone that gives such an impression of grandeur to the mind, but it is also the picturesque forms and coloring. After the waters of the Yellowstone roll over the upper descent, they flow with great rapidity over the apparently flat, rocky bottom, which spreads out to nearly double its width above the falls, and continues thus until near the Lower Falls, when the channel again contracts, and the waters seem, as it were, to gather themselves into one compact mass, and plunge over the descent of three hundred and fifty feet in detached drops of foam as white as snow; some of the large globules of water shoot down like the contents of an exploded rocket. It is a sight far more beautiful than, though not so grand or impressive as, that of Niagara Falls. A heavy mist

THE LOWER FALLS.

always rises from the water at the foot of the falls, so dense that one cannot approach within two hundred or three hundred feet, and even then the clothes will be drenched in a few moments. Upon the yellow, nearly vertical wall of the west side, the mist mostly falls; and for three hundred feet from the bottom the wall is covered with a thick matting of mosses, sedges, grasses, and other vegetation of the most vivid green, which have sent their small roots into the softened rocks, and are nourished by the ever-ascending spray. At the base and quite high up on the sides of the cañon are great quantities of talus, and through the fragments of rocks and decomposed spring deposits may be seen the horizontal strata of breccia."

TOWER CREEK.

"Tower Creek rises in the high divide between the valleys of the Missouri and Yellowstone, and flows about ten miles through a cañon so deep and gloomy that it has very properly earned the appellation of the Devil's Den. As we gaze from the margin down into the depths below, the little stream, as it rushes foaming over the rocks, seems like a white thread, while on the sides of the gorge the sombre pinnacles rise up like Gothic spires. About two hundred yards above its entrance into the Yellowstone, the stream pours over an abrupt descent of one hundred and fifty-six feet, forming one of the most beautiful and picturesque falls to be found in any country. The Tower Falls are about two hundred and sixty feet above the level of the Yellowstone at the junction, and they are surrounded with pinnacle-like columns, composed of the volcanic breccia, rising fifty feet above the falls, and extending down to the foot, standing like gloomy sentinels or like the gigantic pillars at the entrance of some grand temple. One could almost imagine that the idea of the Gothic style of architecture had been caught from such carvings of Nature. Immense bowlders of basalt and granite here obstruct the flow of the stream above and below the falls; and, although, so far as we can see, the gorge seems to be made up of the volcanic cement, yet we know that, in the loftier mountains, near the source of the stream, true granitic as well as igneous rocks prevail."

YELLOWSTONE LAKE.

"On the 28th of July (1871)," says Professor Hayden, "we arrived at the lake, and pitched our camp on the northwest shore, in a beautiful grassy meadow or opening among the dense pines. The lake lay before us, a vast sheet of quiet water, of a most delicate ultramarine hue, one of the most beautiful scenes I have ever beheld. The entire party were filled with enthusiasm. The great object of all our labors had been reached, and we were amply paid for all our toils. Such a vision is worth a lifetime, and only one of such marvellous beauty will ever greet human eyes. From whatever point of view one may behold it, it presents a unique picture. We had brought up the

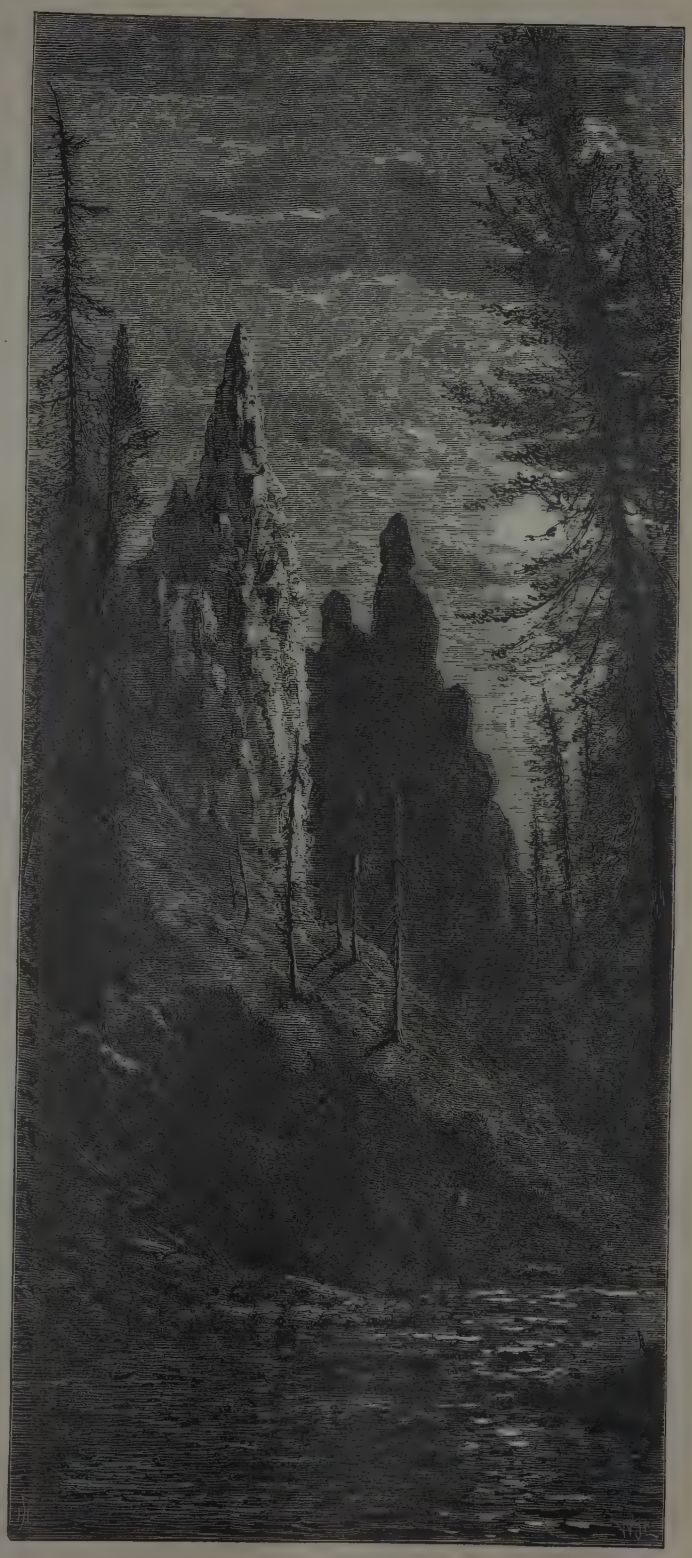
CLIFFS ON THE YELLOWSTONE.

framework of a boat, twelve feet long and three and a half feet wide, which we covered with stout ducking, well tarred. On the morning of the 29th, Messrs. Stevenson and Elliott started across the lake in the Anna, the first boat ever launched on the Yellowstone, and explored the nearest island, which we named after the principal assistant of the expedition, who was undoubtedly the first white man that ever placed foot upon it. Our little bark, whose keel was the first to plough the waters of the most beautiful lake on our continent, and which must now become historical, was named by Mr. Stevenson in compliment to Miss Anna L. Dawes, the amiable daughter of Hon. H. L. Dawes. My whole party were glad to manifest, by this slight tribute, their gratitude to the distinguished statesman, whose generous sympathy and aid had contributed so much toward securing the appropriation which enabled them to explore this marvellous region.

"Usually in the morning the surface of the lake is calm, but, toward noon and after, the waves commence to roll, and the white caps rise high, sometimes four or five feet. Our little boat rode the waves well; but, when a strong breeze blew, the swell was too great, and we could only venture along the shore. This lake is about twenty-two miles in length from north to south, and an average of ten to fifteen miles in width from east to west. It has been aptly compared to the human hand; the northern portion would constitute the palm, while the southern prolongations or arms might represent the fingers. There are some of the most beautiful shore-lines along this lake that I ever saw. Some of the curves are as perfect as if drawn by the hand of art. Our little boat performed most excellent service. A suitable framework was fastened in the stern for the lead and line, and, with the boat, a system of soundings was made that gave a very fair idea of the average depth of the lake. The greatest depth discovered was three hundred feet. It is fed by the snows that fall upon the lofty ranges of mountains that surround it on every side. The water of the lake has at all seasons nearly the temperature of cold spring-water. The most accomplished swimmer could live but a short time in it; the dangers attending the navigation of such a lake in a small boat are thereby greatly increased. The lake abounds in salmon-trout, and is visited by great numbers of wild-fowl.

"We adopted the plan of making permanent camps at different points around the lake while explorations of the country in the vicinity were made. Our second camp was pitched at the hot springs on the southwest arm. This position commanded one of the finest views of the lake and its surroundings. While the air was still, scarcely a ripple could be seen on the surface, and the varied hues, from the most vivid green shading to ultramarine, presented a picture that would have stirred the enthusiasm of the most fastidious artist. Sometimes, in the latter portion of the day, a strong wind would arise, arousing this calm surface into waves like the sea. Near our camp there is a thick deposit of the silica, which has been worn by the waves into a bluff wall, twenty-five feet high above the water. It must have originally extended far out into the

lake. The belt of springs at this place is about three miles long and half a mile wide. The deposit now can be seen far out in the deeper portions of the lake, and the bubbles that arise to the surface in various places indicate the presence, at the orifice, of a hot spring beneath. Some of the funnel-shaped craters extend out so far into the lake, that the members of our party stood upon the silicious mound, extended the rod into the deeper waters, and caught the trout, and cooked them in the boiling spring, without removing them from the hook. These orifices, or chimneys, have no connection with the waters of the lake. The hot fumes coming up through fissures, extending down toward the interior of the earth, are confined within the walls of the orifice, which are mostly circular, and beautifully lined with delicate porcelain."



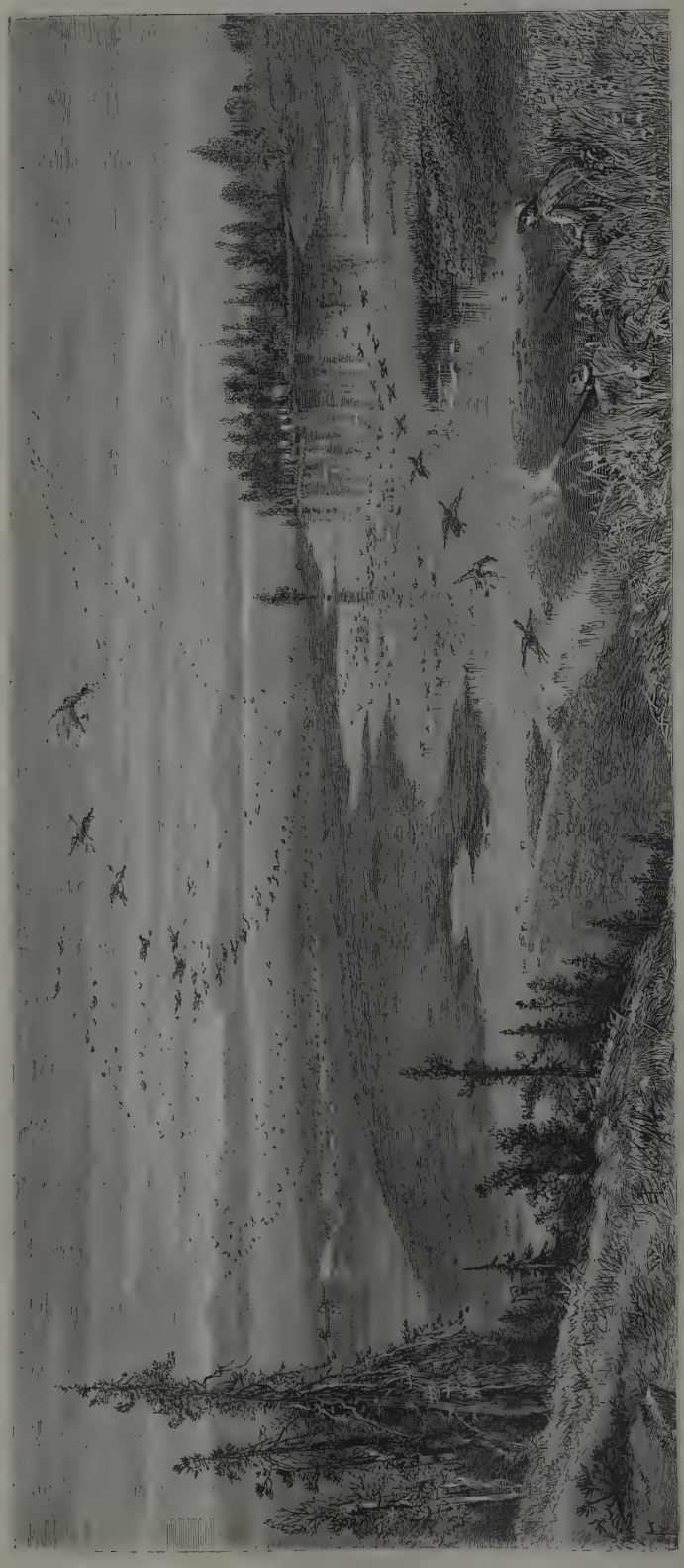
Tower Creek.

THE HOT SPRINGS.

"Upon the west side of Gardiner's River, on the slope of the mountain, is one of the most remarkable groups of hot springs in the world. The springs in action at the present time are not very numerous, or even so wonderful as

some of those higher up in the Yellowstone Valley or in the Fire-Hole Basin, but it is in the remains that we find so instructive records of their past history. The calcareous deposits from these springs cover an area of about two miles square. The active springs extend from the margin of the river five thousand five hundred and forty-five feet, to an elevation nearly one thousand above, or six thousand five hundred and twenty-two feet above the sea by barometrical measurement. Our path led up the hill by the side of a wall of lower cretaceous rocks, and we soon came to the most abundant remains of old springs, which, in past times, must have been very active. The steep hill, for nearly a mile, is covered with a thick crust, and, though much decomposed and covered with a moderately thick growth of pines and cedars, still bore traces of the same wonderful architectural beauty displayed in the vicinity of the active springs farther up the hill. After ascending the side of the mountain, about a mile above the channel of Gardiner's River, we suddenly came in full view of one of the finest displays of Nature's architectural skill the world can produce. The snowy whiteness of the deposit at once suggested the name of White-Mountain Hot Spring. It had the appearance of a frozen cascade. If a group of springs near the summit of a mountain were to distribute their waters down the irregular declivities, and they were slowly congealed, the picture would bear some resemblance in form. We pitched our camp at the foot of the principal mountain, by the side of the stream that contained the aggregated waters of the hot springs above, which, by the time they had reached our camp, were sufficiently cooled for our use. Before us was a hill two hundred feet high, composed of the calcareous deposit of the hot springs, with a system of step-like terraces, which would defy any description by words. The eye alone could convey any adequate conception to the mind. The steep sides of the hill were ornamented with a series of semicircular basins, with margins varying in height from a few inches to six or eight feet, and so beautifully scalloped and adorned with a kind of bead-work, that the beholder stands amazed at this marvel of Nature's handiwork. Add to this a snow-white ground, with every variety of shade, of scarlet, green, and yellow, as brilliant as the brightest of our aniline dyes. The pools or basins are of all sizes, from a few inches to six or eight feet in diameter, and from two inches to two feet deep. As the water flows from the spring over the mountain-side from one basin to another, it loses continually a portion of its heat, and the bather can find any desirable temperature. At the top of the hill there is a broad, flat terrace, covered more or less with these basins, one hundred and fifty to two hundred yards in diameter, and many of them going to decay. Here we find the largest, finest, and most active spring of the group at the present time. The largest spring is very near the outer margin of the terrace, and is twenty-five by forty feet in diameter, the water so perfectly transparent that one can look down into the beautiful ultramarine depth to the bottom of the basin. The sides of the basin are ornamented with coral-like forms, with a great variety of shades, from pure white to a bright cream-yellow, and the blue sky, reflected in the

TOWER FALLS



Yellowstone Lake.

transparent waters, gives an azure tint to the whole, which surpasses all art. Underneath the sides of many of these pools are rows of stalactites, of all sizes, many of them exquisitely ornamented, formed by the dripping of the water over the margins of the basins.

"On the west side of this deposit, about one-third of the way up the White Mountain from the river and terrace, which was once the theatre of many active springs, old chimneys, or craters, are scattered thickly over the surface, and there are several large holes and fissures leading to vast caverns beneath the crust. The crust gives off a dull, hollow sound beneath the tread, and the surface gives indistinct evidence of having been adorned with the beautiful pools or basins just described. As we pass up to the base of the principal terrace, we find a large area covered with shallow pools, some of them containing water, with all the ornamentations perfect, while others are fast going to decay, and the decomposed sediment is as white as snow. Upon this kind of sub-ter-

race is a remarkable cone, about fifty feet in height, and twenty feet in diameter at the base. From its form we gave it the name of the Liberty Cap. It is undoubtedly the remains of an extinct geyser. The water was forced up with considerable power, and probably without intermission, building up its own crater until the pressure beneath was exhausted, and then it gradually closed itself over at the summit and perished. No water flows from it at the present time. The layers of lime were deposited around it like the layers of straw on a thatched roof, or hay on a conical stack.

"The entire Yellowstone Basin is covered more or less with dead and dying springs, but there are centres or groups where the activity is greatest at the present time. Below the falls there is an extensive area covered with the deposits which extend from the south side of Mount Washburn across the Yellowstone rim, covering an area of ten or fifteen square miles. On the south side of Mount Washburn there is quite a remarkable group of active springs. They are evidently diminishing in power, but the rims all around reveal the most powerful manifestations far back in the past. Sulphur, copper, alum, and soda, cover the surface. There is also precipitated around the borders of some of the mud-springs a white efflorescence, probably nitrate of potash. These springs are located on the side of the mountain nearly one thousand feet above the margin of the cañon, but extend along into the level portions below. In the immediate channel of the river, at the present time, there are very few springs, and these not important. A few small steam-vents can be observed only from the issue of small quantities of steam. One of these springs was bubbling quite briskly, but had a temperature of only one hundred degrees. Extending across the cañon on the opposite side of the Yellowstone, interrupted here and there, this group of springs extends for several miles, forming one of the largest deposits of silica, but only here and there are there signs of life. Many of the dead springs are mere basins, with a thick deposit of iron on the sides, lining the channel of the water that flows from them. These vary in temperature from ninety-eight to one hundred and twenty degrees. The highest temperature was one hundred and ninety-two degrees. The steam-vents are very numerous, and the chimneys are lined with sulphur. Where the crust can be removed, we find the under-side lined with the most delicate crystals of sulphur, which disappear like frost-work at the touch. Still there is a considerable amount of solid amorphous sulphur. The sulphur and the iron, with the vegetable matter, which is always very abundant about the springs, give, through the almost infinite variety of shades, a most pleasing and striking picture."

MUD-SPRINGS.

"We pitched our camp on the shore of the river, near the Mud Springs, thirteen and a half miles above our camp on Cascade Creek. The springs are scattered along on both sides of the river, sometimes extending upon the hill-sides fifty to two hundred

feet above the level of the river. Commencing with the lower or southern side of the group, I will attempt to describe a few of them. The first one is a remarkable mud-spring, with a well-defined circular rim composed of fine clay, and raised about four feet above the surface around, and about six feet above the mud in the basin. The diameter of the basin is about eight feet. The mud is so fine as to be impalpable, and the whole may be most aptly compared to a caldron of boiling mush. The gas is constantly escaping, throwing up the mud from a few inches to six feet in height; and there is no doubt that there are times when it is hurled out ten to twenty feet, accumulating around the

The First Boat on the Yellowstone.

rim of the basin. About twenty yards distant from the mud-spring just described is a second one, with a basin nearly circular, forty feet in diameter, the water six or eight feet below the margin of the rim. The water is quite turbid, and is boiling moderately. Small springs are flowing into it from the south side, so that the basin forms a sort of reservoir. The temperature, in some portions of the basin, is thus lowered to ninety-eight degrees. Several small hot springs pour their surplus water into it, the temperatures of which are one hundred and eighty, one hundred and seventy, one hundred and eighty-four, and one hundred and fifty-five degrees. In the reservoirs, where the water

boils up with considerable force, the temperature is only ninety-six degrees, showing that the bubbling was due to the escape of gas. The bubbles stand all over the surface. About twenty feet from the last is a small mud-spring, with an orifice ten inches in diameter, with whitish-brown mud, one hundred and eighty-two degrees. Another basin near the last has two orifices, the one throwing out the mud with a dull thud about once in three seconds, spurting the mud out three or four feet; the other is content to boil up quite violently, occasionally throwing the mud ten to twelve inches. This mud, which has been wrought in these caldrons for perhaps hundreds of years, is so fine and pure that the manufacturer of porcelain-ware would go into ecstasy at the sight. The

Hot-Spring Cone.

contents of many of the springs are of such a snowy whiteness that, when dried in cakes in the sun or by a fire, they resemble the finest meerschaum. The color of the mud depends upon the superficial deposits which cover the ground, through which the waters of the springs reach the surface. They were all clear hot springs originally, perhaps geysers even; but the continual caving-in of the sides has produced a sort of mud-pot, exactly the same as the process of preparing a kettle of mush. The water is at first clear and hot; then it becomes turbid from the mingling of the loose earth around the sides of the orifice, until, by continued accessions of earth, the contents of the basin become of the consistency of thick mush, and, as the gas bursts up through it, the dull, thud-like noise is produced. Every possible variation of condition of the contents is

Hot Springs.

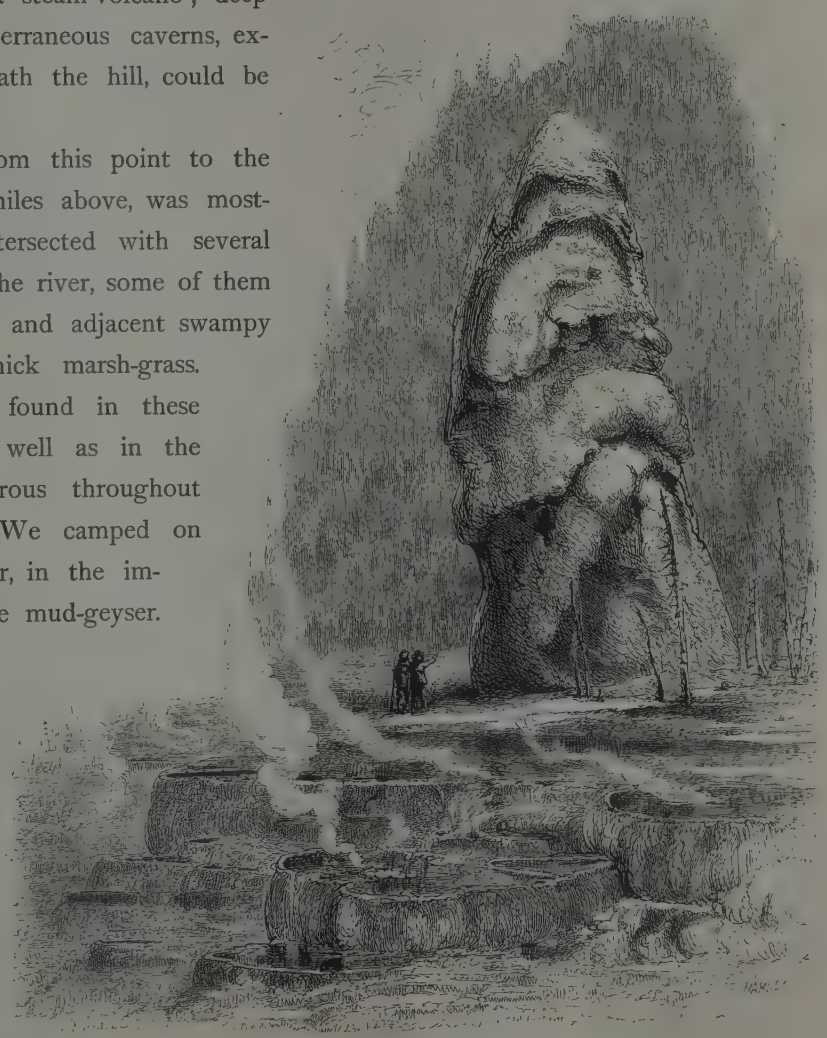
found, from simple milky turbidness to a stiff mortar. On the east side of the Yellowstone, close to the margin of the river are a few turbid and mud springs, strongly impregnated with alum. The mud is quite yellow, and contains much sulphur. This we called a mud-sulphur spring. The basin is fifteen by thirty feet, and has three centres of ebullition, showing that, deep down underneath the superficial earth, there are three separate orifices, not connected with each other, for the emission of heated waters."

SULPHUR-MOUNTAIN AND MUD-VOLCANO.

From Lieutenant Barlow's report we derive the following description of a sulphur-mountain near Cascade Creek, and of a mud-volcano a few miles distant: "Toward the western verge of a prairie of several miles in extent, above the Yellowstone Falls, a hill of white rock was discovered, which, upon investigation, proved to be another of the 'soda-mountains,' as they are called by the hunters. Approaching nearer, I found jets of smoke and steam issuing from the face of the hill, while its other side was hollowed out into a sort of amphitheatre, whose sides were steaming with sulphur-fumes, the ground hot and parched with internal fires. Acre after acre of this hot volcanic surface lay before me, having numerous cracks and small apertures, at intervals of a few feet, whence were expelled, sometimes in steady, continuous streams, sometimes in

puffs, like those from an engine, jets of vapor more or less impregnated with mineral substances. I ascended the hill, leaving my horse below, fearful that he might break through the thin rock-crust, which in many places gave way beneath the tread, revealing caverns of pure crystallized sulphur, from which hot fumes were sure to issue. The crystals were very fine, but too frail to transport without the greatest care. A large boiling spring, emitting strong fumes of sulphur and sulphuretted hydrogen, not at all agreeable, was also found. The water from this spring, overrunning its basin, trickled down the hill-side, leaving a highly-colored trace in the chalky rock. Upon the opposite side was found a number of larger springs. One, from its size and the power it displayed in throwing water to the height of several feet above the surface, was worthy of notice. Near this was a spring having regular pulsations, like a steam-engine, giving off large quantities of steam, which would issue forth with the roar of a hurricane. This was, in reality, a steam-volcano; deep vibrations in the subterraneous caverns, extending far away beneath the hill, could be distinctly heard.

"The country from this point to the mud-volcano, a few miles above, was mostly rolling prairie, intersected with several streams flowing into the river, some of them having wide estuaries and adjacent swampy flats, covered with thick marsh-grass. Ducks were usually found in these sluggish streams, as well as in the little lakes so numerous throughout this whole region. We camped on the bank of the river, in the immediate vicinity of the mud-geyser. This being the first specimen of the true geysers yet seen, it was examined with great curiosity. The central point of interest, however, is the mud-volcano, which has broken out from



Liberty-Cap.

the side of a well-timbered hill. The crater is twenty-five feet across at the top, gradually sloping inward to the bottom, where it becomes about half this diameter Its depth is about thirty feet. The deposit is gray mud, nearly pure alumina, and has been thrown up by the action of the volcano at no very distant period. The rim of the crater on the down-hill side is some ten feet in height, and trees fifty

Mud-Springs.

feet high and a hundred feet distant are loaded with mud thrown from this volcano. The surface of the bottom is in a constant state of ebullition, puffing and throwing up masses of boiling mud, and sending forth dense columns of steam several hundred feet above the surrounding forests. This vapor can be seen for many miles in all directions. Some four hundred yards from this crater are three large hot springs of muddy water, one of which proved to be a geyser, having periods of active

eruption about every six hours. The phenomena attending these eruptions are as follows: Soon after the violent period passes, the water in the pool gradually subsides through the orifice in the centre, the surface falling several feet, the water almost entirely disappearing from sight. It then gradually rises again until the former level is reached, during which occasional ebullitions of greater or lesser magnitude occur. Great agitation then ensues; pulsations, at regular intervals of a few seconds, take place, at each of which the water in the crater is elevated higher and higher, until, finally, after ten minutes, a column is forced up to the height of thirty or forty feet. During this period waves dash against the sides of the basin, vast clouds of steam escape, and a noise like the rumbling of an earthquake takes place. Suddenly, after about fifteen minutes of this commotion, the waves recede, quiet is restored, the waters sink gradually to their lowest limit, from which they soon rise again, and repeat the same operation."

Soda-Springs.

THE GREAT GEYSER BASIN.

We also quote from Lieutenant Barlow's report the following account of the great Geysers on Fire-Hole River: "Entering the basin from the north, and following the banks of the Fire-Hole River, whose direction there is about northeast, a series of rapids, quite near together, is encountered, when the river makes a sharp bend to the southwest, at which point is found a small steam-jet upon the right. A warm stream comes in from the left, falling over a bank ten feet in height. A short distance beyond a second rapid is found, and then another, about one hundred yards farther on, where the gate of the Geyser Basin is entered. Here, on either side of the river, are two lively geysers called the Sentinels. The one on the left is in constant agitation, its waters revolving horizontally with great violence, and occasionally spouting upward to the height of twenty feet, the lateral direction being fifty feet. Enormous masses of steam are ejected. The crater of this geyser is three feet by ten. The opposite Sentinel is not so constantly active, and is smaller. The rapids here are two hundred yards in length, with a fall of thirty feet. Following the bank of the river, whose

THE GIANT GEYSER.

general course is from the southeast, though with many windings, two hundred and fifty yards from the gate we reach three geysers acting in concert. When in full action, the display from these is very fine. The waters spread out in the shape of a fan, in consequence of which they have been named the Fan Geysers. A plateau, opposite the latter, contains fifteen hot springs, of various characteristics; some are of a deep-blue color, from sulphate of copper held in solution, and having fanciful caverns distinctly visible below the surface of the water. The openings at the surface are often beautifully edged with delicately-wrought fringes of scalloped rock. One variety deposits a red or brown leathery substance, partially adhering to the sides and bottom of the cavern, and waving to and fro in the water like plants. The size of these springs varies from five to forty feet in diameter. One hundred yards farther up the east side of the stream is found a double geyser, a stream from one of its orifices playing to the height of eighty or ninety feet, emitting large volumes of steam. From the formation of its crater it was named the Well Geyser. Above is a pine-swamp of cold water, opposite which, and just above the plateau previously mentioned, are found some of the most interesting and beautiful geysers of the whole basin.

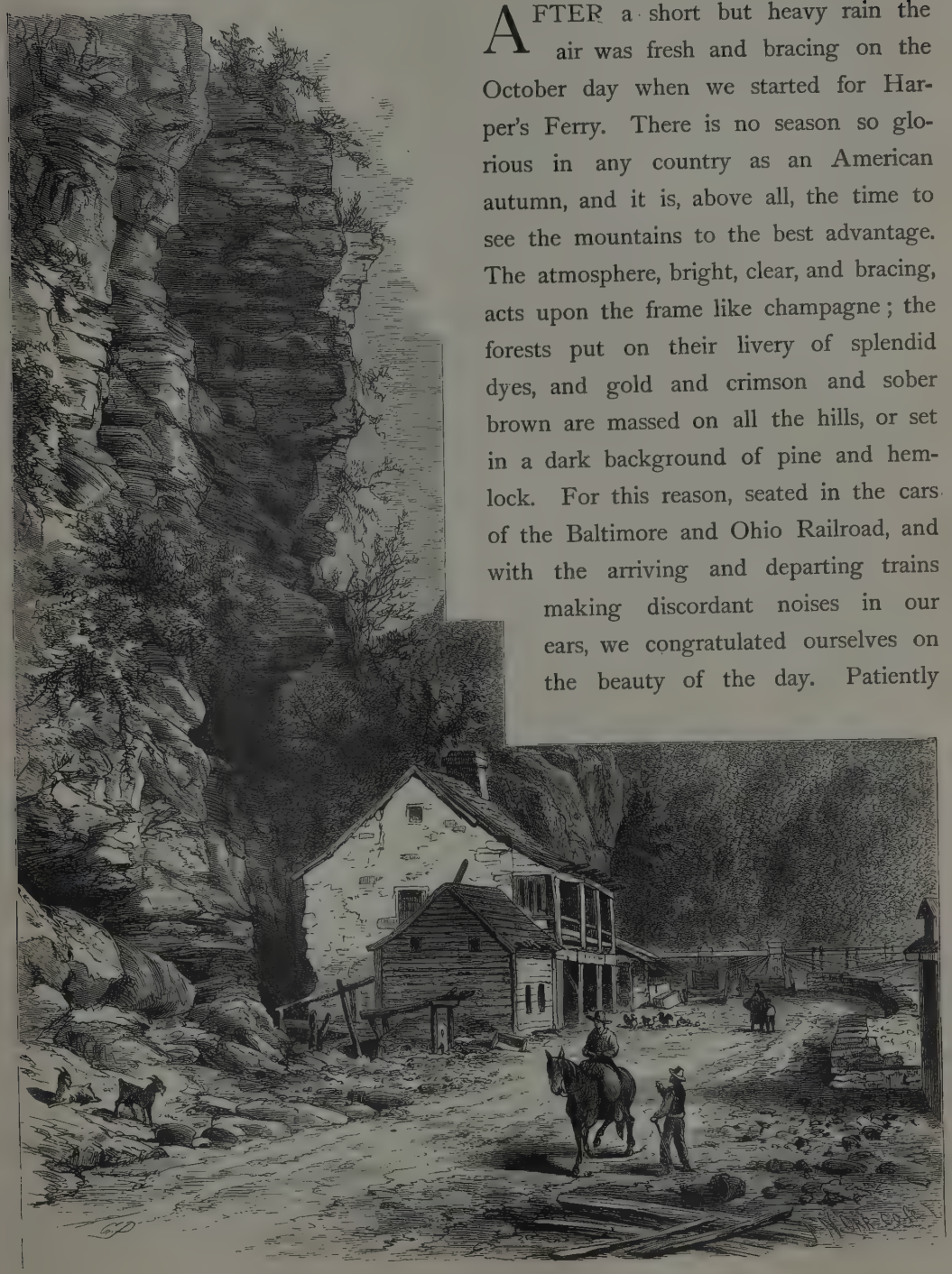
"First we come upon two smaller geysers near a large spring of blue water, while a few yards beyond are seen the walls and arches of the Grotto. This is an exceedingly intricate formation, eight feet in height, and ninety in circumference. It is hollowed into fantastic arches, with pillars and walls of almost indescribable variety. This geyser plays to the height of sixty feet several times during twenty-four hours. The water, as it issues from its numerous apertures, has a very striking and picturesque effect.

"Near the Grotto is a large crater, elevated four feet above the surface of the hill, having a rough-shaped opening, measuring two by two and a half feet. Two hundred yards farther up are two very fine large geysers, between which and the Grotto are two boiling springs. Proceeding one hundred and fifty yards farther, and passing two hot springs, a remarkable group of geysers is discovered. One of these has a huge crater five feet in diameter, shaped something like the base of a horn—one side broken down—the highest point being fifteen feet above the mound on which it stands. This proved to be a tremendous geyser, which has been called the Giant. It throws a column of water the size of the opening to the measured altitude of one hundred and thirty feet, and continues the display for an hour and a half. The amount of water discharged was immense, about equal in quantity to that in the river, the volume of which, during the eruption, was doubled. But one eruption of this geyser was observed. Its periodic turns were not, therefore, determined. Another large crater close by has several orifices, and, with ten small jets surrounding it, formed, probably, one connected system. The hill built up by this group covers an acre of ground, and is thirty feet in height."

In the report to Congress by the Committee on Public Lands we learn that "the entire area comprised within the limits of the reservation is not susceptible of cultivation with any degree of certainty, and the winters would be too severe for stock-raising. Whenever the altitude of the mountain-districts exceeds six thousand feet above tide-water, their settlement becomes problematical, unless there are valuable mines to attract people. The entire area within the limits of the proposed reservation is over six thousand feet in altitude; and the Yellowstone Lake, which occupies an area fifteen by twenty-two miles, or three hundred and thirty square miles, is seven thousand four hundred and twenty-seven feet. The ranges of mountains that hem the valleys in on every side rise to the height of ten thousand and twelve thousand feet, and are covered with snow all the year. These mountains are all of volcanic origin, and it is not probable that any mines or minerals of value will ever be found there. During the months of June, July, and August, the climate is pure and most invigorating, with scarcely any rain or storms of any kind; but the thermometer frequently sinks as low as twenty-six degrees. There is frost every month of the year." These statements make it evident that, in setting apart this area "as a great national park and pleasure-ground for the benefit and enjoyment of the people," no injury has been done to other interests. The land did not need to be purchased, but simply withdrawn from "settlement, occupancy, or sale;" and hence, by timely action, a great public benefit was secured, which in a few years would have been impracticable, or at least attainable only with great difficulty. The time is not distant, in the opinion of the Congressional committee, when this region will be a place of "resort for all classes of people from all portions of the globe." The Northern Pacific Railroad, now rapidly advancing toward completion, will render the park easily accessible; and, this once accomplished, the marvels of the strange domain will tempt the curious in great numbers to visit it. As a place of resort for invalids, the Yellowstone Valley, on account of its pure and exhilarating atmosphere, is believed to be unexcelled by any portion of the globe; and, if this anticipation prove true, there will be additional reason to be gratified at the wise forethought which secured it for public uses forever. The Congressional enactment which creates the park amply provides for its control and management. "It shall," says the act, "be under the exclusive control of the Secretary of the Interior, whose duty it shall be, as soon as practicable, to make and publish such rules and regulations as he may deem necessary or proper for the care and management of the same. Such regulations shall provide for the preservation, from injury or spoliation, of all timber, mineral deposits, natural curiosities, or wonders, within said park. The secretary may, in his discretion, grant leases for building-purposes, for terms not exceeding ten years, of small parcels of ground, at such places in said park as shall require the erection of buildings for the accommodation of visitors; all of the proceeds of said leases to be expended under his direction in the management of the same, and the construction of roads and bridle-paths therein."

HARPER'S FERRY.

WITH ILLUSTRATIONS BY GRANVILLE PERKINS.



AFTER a short but heavy rain the air was fresh and bracing on the October day when we started for Harper's Ferry. There is no season so glorious in any country as an American autumn, and it is, above all, the time to see the mountains to the best advantage. The atmosphere, bright, clear, and bracing, acts upon the frame like champagne; the forests put on their livery of splendid dyes, and gold and crimson and sober brown are massed on all the hills, or set in a dark background of pine and hemlock. For this reason, seated in the cars of the Baltimore and Ohio Railroad, and with the arriving and departing trains making discordant noises in our ears, we congratulated ourselves on the beauty of the day. Patiently

waiting, we watch the passengers upon the platform, uniting and dispersing, aggregating in little groups, only to dissolve and form again—a cosmopolitan scene, for here come, going East, West, or South, representatives of all nations. We soon, however, leave these scenes behind us, and are skirting the brick-fields lying on the western suburbs of Baltimore, and by hillocks covered with low and stunted shrubbery of cedar and oak, past the Relay and on to Ellicott's City, where may be seen the traces of the great flood in the Patapsco, which, in 1868 swept away the mills and dwellings in the valley.

From Ellicott's City the road winds along the Patapsco, and only leaves that picturesque, artist-haunted river for short distances until it strikes the Potomac at Point of Rocks, and follows that river to its junction with the Shenandoah at Harper's Ferry. The scenery up to this point is not striking, but often possesses a quiet beauty that well repays the attention of the traveller. Glimpses of sequestered woodland-paths wind off and are lost in the forest; long, tree-fringed river-reaches come into view at intervals as the engine pursues its sinuous course by the river-bank, in full sight now from this side of the train, now from that, its polished mountings glittering in the sunlight, and all its heavy and seemingly unwieldy bulk instinct with graceful life and easy power.

Stretching far away to the right, dimly outlined in their characteristic smoky blue, appears the range of mountains, nestled in a gorge of which the gate-way to the wild and magnificent scenes beyond lies our objective point, Harper's Ferry. As we approach, the smoky whiteness of the enveloping haze is dissipated, and gives place to a more pronounced blue; the billowy hills roll more sharply clear to the eye; the irregular lines of the foliage stand out distinct, and here and there shaggy and wind-dishevelled pines cut the sky-line upon the summit-ridge.

The first near sight of the mountains is inevitably one of disappointment. Is it not thus with all the stupendous works of Nature? The man who expects to stand spell-bound and awe-stricken before Niagara, will find his emotion very commonplace in contrast to the exalted state of feeling he anticipated. Very seldom, indeed, are the combinations such as to present these scenes in all their impressive grandeur; and rarer still is the mind that is capable of comprehending at once all that is taught by them. Yet those who have been merely summer sojourners among the "eternal hills," can understand, if they have used their time wisely, why the mountaineer comes gradually to love them. He can feel, seeing them again, the force of the attachment that animated, thousands of years ago, the Hebrew people, whose strong places of defence they were, and that animates to-day the Switzer, who, far away from his native Alps, grows homesick, even at times unto death, and whose eyes are tear-stained whenever he hears the familiar "Ranz des Vaches."

The imagination at first may refuse to be satisfied, but there will be in the end no sense of failure, no lack of fulfilment of all, and more than all, that was anticipated to those who become friends with the mountains, who look down into their dwarfing val-

HARPER'S FERRY.

leys, who wander along their still paths, opening, by sudden surprises, laughing cascades, and odorous with the resinous pine and hemlock, and who see towering far above, bearing up their massive weight of greenery, their sheltering forests. Climb the Maryland Heights, as we are to do to-day, and pause on the ascent and look back. Fair and open lies the northern landscape, bounded by its semicircle of mountains. How the mind expands and feels a sense of delight and power as the eye takes in, at one sweep, the glorious scene! The feeling that pictures us as slowly traversing the huge mountains, insignificant atoms on its vast surface, ants that crawl over an ant-hill, vanishes. And then to this first exhilaration, this flush and glow of pleasure, succeeds the softer, calmer mood that sees, in the still and marvellously beautiful vision, but one of the least of the wonderful works of the Creator. There is no disappointment in a mountain.

While we have been moralizing, the train has thundered over the costly and graceful bridge built by the Baltimore and Ohio Railroad Company, and which spans the Potomac, on five substantial stone piers, just at its junction with the Shenandoah. When fairly on the platform and the train has left the view unobstructed, we see rising, sheer and inaccessible, directly before us the rocky sides of the Maryland Heights. Upon their laminated surface the curious eye ranges among the overhanging masses of projecting stone, to this point and to that, in search of the well-known Profile Rock. It catches, jutting out from a crevice in the wall-like side, a mass of shrubbery—the hair; a little lower down a patch of stunted bushes—the epaulets; glancing then a little to the left, the imagination quickly forms the features. Curiosity being thus satisfied, we turn to the foot of these frowning cliffs, where are seen the slow, languid canal-boats, almost imperceptibly in motion, crawling into the lock at the bridge, and vanishing by inches around the mountain. On the left is Bolivar Heights, and below them is the ruined armory at the ferry—a long row of walls, windowless, roofless, blackened and desolate. Far up, the mountains recede and become low hills, and close in upon the rocky-islanded Potomac, which comes boldly sweeping down past the town, and meets the Shenandoah, and unites with it on its way to the Chesapeake and the ocean.

A brief stroll through the town itself will furnish many items of antiquarian interest, and will also bring to mind some stirring and important scenes in modern history.

The town of Harper's Ferry is built at the foot of the narrow tongue of land that thrusts itself out like a cutwater, separating the Potomac and the Shenandoah, and known as Bolivar Heights. It lies in Jefferson County, West Virginia. Just across the Potomac are the Maryland Heights, in Washington County, Maryland, and over the Shenandoah, beyond Loudon Heights, lies Virginia proper. Including the little town of Bolivar, on the heights, the population of Harper's Ferry is about two thousand. The principal street runs parallel with the Shenandoah, with a side-street ascending the hill to the right, perpendicular to which numerous stairs, cut in the solid rock, lead up still steeper ascents.

Quaint and old-fashioned in its best estate, two causes have contributed to make the town still more sleepy and dilapidated than is its normal condition. The recent war stunned it. Then came the disastrous flood of October, 1870, in the Shenandoah. Pass where you will, there are evidences of the desolation left behind by these two occurrences. And the people of the Ferry have very naturally lost heart. They talk about the old days when the Shenandoah ran the mills and the government rifle-works on its banks; when the armory was in busy activity, and a regiment of lusty workmen hammered and rolled and moulded the arms which it was then thought would never be used

View from Jefferson Rock.

except against foreign foes; when many millions of solid dollars—a golden Pactolus—poured into the arms of the thriving little village from the national treasury. The inhabitants now talk of these days of prosperity with regret, with even a mild kind of hope for better things in the future, but with no buoyancy of spirit.

The place takes its name from Robert Harper, a native of Oxford, England, who emigrated to this country in 1723. Harper settled at Philadelphia, and seems to have been a man of much ingenuity. At this time the infant colonies were offering high prices to skilled workmen, and Harper, being by profession an architect, was frequently required to travel to distant parts of the country. It was when on his way to erect a

Loudon Mountain and the Shenandoah.

meeting-house for the members of the Society of Friends, whose settlement, near where Winchester now stands, in the rich Valley of Virginia, was even then, in 1747, flourishing and increasing, that Harper, as a short route to his destination, first saw this pass. He was so attracted by it that he bought a tract of land here, which was subsequently confirmed to him by Lord Fairfax. In time, as the country became more settled, and the passage through the barrier of the Blue Ridge better known, he established a ferry here. The house erected by Harper, on what is now High Street, is still to be seen. In outward appearance it is one of the newest in the town; and, if it were not for the semicircular, latticed window in the side-wall, which betrays its antiquity, it might, like a well-preserved old beau, hold its own with its younger contemporaries, and deny its years. In 1794 the prosperity of Harper's Ferry, for half a century and more, became assured. It was at that date, and during the administration of General Washington, that the town,

on account of the many advantages it offered, but more especially for its unrivalled water-power, was chosen as the site of the national armory. Land was purchased along the Potomac and Shenandoah. Subsequently Bolivar and Loudon Heights were acquired, and the buildings of the armory and the dwellings of the operatives gradually formed in themselves a small but thriving settlement. So the Ferry prospered until the night of Sunday, October 16, 1859. From that night the town was doomed. Stealthily, at ten o'clock, a band of twenty men crossed the railroad-bridge—then a clumsy, covered structure—over the Potomac. They came from the Maryland side. Quietly the watchmen were captured and the armory seized. They at once proceeded to establish and fortify themselves against an attack. They then threw out pickets, and arrested all persons who ventured abroad. A colored man, who incautiously approached too near the guarded railroad-bridge, was shot down and died soon after. At the dawn of the next day, as the sun struggled through the rising

Pleasant Valley.

mists of the river, the little town was all excitement. The purpose of the invaders, their force, the prospect of other attacks by fresh bands waiting in the fastnesses of the mountains, were all unknown, and added the element of mystery to the actual fact, that was but too patent, that a lion had suddenly pounced on their sheepfold. All through the long morning a scattered fusillade was kept up between the armory and the neighboring houses; and the sharp crack of the rifle from the overshadowing hills was quickly returned from some one of the barred windows below. Gradually the toils tightened around the party desperately at bay in the armory. Some of them now make an attempt to break through the meshes. It is in vain. Take, for instance, one scene—a mere etching amid the terrible occurrences of the day. One man, Lehman by name, threw himself into the Potomac River with the intention of escaping. He was fired upon, was wounded, raised his hand as if to surrender, and fell. There was no mercy. A rifleman waded out to the rock where the wounded man lay—they show you the place yet—and deliberately put his rifle to his head and blew out his brains. Fighting now with the energy of despair, Brown—for, of course, it is of the celebrated "Brown raid" that we are speaking—now retreated to the engine-house, the only building of the whole armory which is still standing. There he remained all through Tuesday night with his wounded and his prisoners. It was a sad night for the town of Harper's Ferry—but yesterday so quiet and peaceful, now with the dead in several households, and the fate of the morrow involved in uncertainty. It had rained all Monday. The night was dark, the atmosphere raw and cold. The conflict was stayed, but the hours wore away in unceasing watchfulness. At seven on Tuesday morning help came. Colonel Robert E. Lee arrived with a force of marines, hastily gathered together, and dispatched from Washington. The strong doors of the engine-house were soon battered in, and, with the loss of one man killed, the invaders were captured. Brown was executed at Charlestown soon after—an impolitic proceeding, in the opinion of many Southern men. So ended the Harper's Ferry raid, and so commenced, in reality, our civil war. During that conflict, Harper's Ferry was alternately in the possession of the Northern and Southern forces, and suffered from both. When the ordinance of secession was passed by the Virginia Convention, the Ferry was the station of a company of United States regulars, under the command of a Lieutenant Jones. Rumors came as thick and fast as leaves from the mountain woods in November. The Virginia militia were marching to capture the Ferry. They were coming up the Valley; they were coming down the Potomac; they were near Bolivar; they were on Maryland Heights. So threatening was the aspect of affairs that Lieutenant Jones was ordered to retreat. Then, for the first time, the torch—to be thereafter the instrument of so much destruction, bitterness, and suffering, in the annals of the village—was applied. The armory was fired. The smoke of the burning buildings curled up, black and ominous through the still air, and loud detonations shook the ground as the explosive material stored within took fire. Much of the armory was then saved by the exertions of the

THE POTOMAC FROM MARYLAND HEIGHTS.

people after the troops had departed. The arsenal alone was completely destroyed, with about fifteen thousand stand of arms. On the night of the 18th of April the Southern forces came in, and soon Colonel Thomas J. (Stonewall) Jackson assumed command. The machinery in the workshops was taken out and removed to Fayetteville, North Carolina. On the 14th of the following June the Southern forces, then under the command of General Joe Johnston, abandoned the Ferry, as of no strategic importance. They completed the destruction already begun. The railroad-bridge was blown up, and the main armory-buildings fired. By this time the town was nearly deserted. Many of its inhabitants had entered the armies of the North or the South; others had left it for more peaceful scenes. The few that remained lived almost continually within the sound of the cannon and the rifle. "For a long time every thing that moved in the streets was shot at." Field-glasses swept the town and the neighboring Bolivar, the favorite scouting-ground of the southern side. It was a fearful ordeal to the few citizens who still clung to the Ferry, as, between two fires, they moved uneasily from place to place.

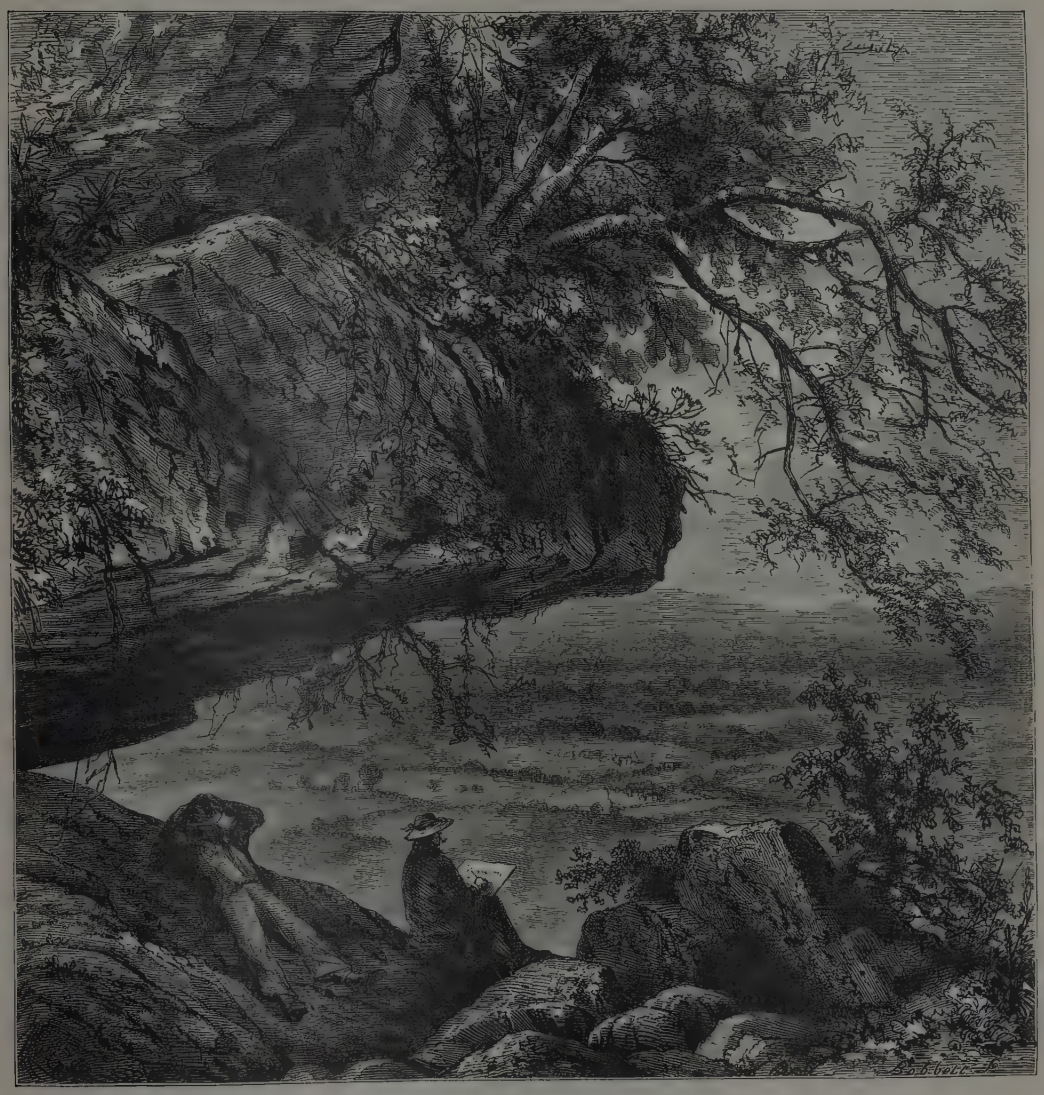
The last important scene that closes this eventful history had its commencement on the 5th of September, 1862, when Jackson's corps crossed the Potomac, at White's Ferry, with Lee's army of invasion. On the 13th Jackson was at Harper's Ferry, McLaws and Walker were on Maryland and Loudon Heights respectively, and Colonel Miles was caught in an untenable position on Bolivar. Here the record of the civil war, as regards the Ferry, rightly stops. McClellan, after Antietam, concentrated his army here. "The whole peninsula formed by the Potomac and the Shenandoah, from Smallwood's Ridge to the junction of the rivers, as well as the surrounding heights, was dotted with tents, and at night was aglow with thousands of watch-fires. From Camp Hill—the ridge that divides the two villages—the spectacle was magnificent, especially at night. A hum of voices, like that of an immense city or the hoarse murmur of the ocean, rose from the valleys on either side, and filled the air with a confusion of sounds."

This brief history of the Ferry, like the story of some war-worn veteran, will give an interest to the traces left by the tide of war that ebbed and flowed over and around the place.

We are now on our way to Jefferson's Rock. Perched high up to the right are the bare walls of the Episcopal and Methodist churches, whose joyous bells, in other times, aroused the echoes of the mountains on the calm Sabbath, while the worshippers wound their slow way up the steep hill, and perhaps paused at the church-door to take a last look at the glorious scene below, the wooded heights, the shining river, the sleeping town, and to thank God that their little home, secure among its sheltering peaks, was so peaceful and unthreatened. We pass by the side of the Episcopal church, which, in its time, must have been an imposing structure. We scramble over the rubbish and look in, and find all foulness and pollution. The four bare walls are open to the sky; the windows are seamed and broken; the place where the altar stood is vacant, and the

marks of the gallery-stairs still wind their way upward into vacancy. Every trace of wood-work has vanished. It was not burned, but torn away gradually in the mere wanton riot of desecration and destruction.

A few steps farther bring us to Jefferson Rock, a remarkable stratified formation that



Maryland Heights.

rises abruptly from the street below. It is the pride of the town, and, among the townspeople, is almost a name "to conjure by." Upon it, according to one account, Jefferson inscribed his name; other authorities say that it was here that he wrote his "Notes on Virginia," "in answer to a foreigner of distinction." The first is, of course, the fact, and the other the accretion that time has added. Here we have the best view attain-

able of the mountains from their base, and of the meeting of the waters in this Vale of Avoca. Beyond the town loom up the Maryland Heights; to the left, Loudon frowns, crowned with its wealth of shaggy foliage, its sides seamed with innumerable fissures and dry ravines made in the crumbling rock by the winter-torrents. At the foot of these ravines the loose earth and gravel washed down has been piled in high and conical heaps. In the gap between these two mountains the Shenandoah, which comes down with many a curve and deflection, skirting the Blue Ridge from Bath County, and the Potomac, which flows south from the table-lands of the Alleghanies and divides the water-shed of the Ohio River and the Chesapeake Bay, unite. How the opening through which their waters find a passage was formed originally—whether by a sudden rifting apart in some violent struggle of Nature, or by the eating away of the barrier that at one time confined here a great interior lake having its outlet by the low hills of the Susquehanna—is a question for the geologist. The unscientific spectator will have no wish to indulge in dry speculations in the presence of the scene that meets his eyes as he turns at the Rock and follows the broad river through the rugged gap, while on either side stand, in silent guard, the Sentinel Peaks. There is no grandeur in the scene—none claimed for it. Life, brightness, and quiet beauty, distinguish it. Over the Shenandoah the ferry-boat turns and twists among the bowlders, and seeks the deeper pools and the slow eddies that give it a passage. The fair river, viewed so near, is spread out between wide, enclosing banks, and catches the silvery glitter of the sunlight and the dark shadows of the hills on its ample bosom, dotted with the black, obtruding forms of rocks, around which the slow current chafes gently in swirls and circling ripples. Around the Maryland Heights run both the railroad and the canal, and the long trains and the unwieldy, cabined, awning-sheltered boats turn the foot of the ridge at intervals, and follow the sinuous river, ever trending southward.

Before visiting Maryland Heights and the superb panoramic view that there sweeps around almost from horizon to horizon, a few moments will be well spent in seeing the less striking scenery of the Heights of Bolivar. Unless the traveller be a remarkably good pedestrian, a carriage and horses will have to be procured for part of the ascent of the former, and the drive around Bolivar over a good road can easily be made a part of the day's programme. If dismayed at the board-signs that, projecting from dilapidated shanties, announce them to be livery-stables, he express doubts as to procuring a respectable team, he forgets one thing—he is in Virginia, and on the borders of the Valley. The man that is surprised, therefore, to see a pretty woman or a fine horse is strangely unacquainted with the latitude. Our landlord, upon being consulted, promises us the horses in a moment, and, in little more than that time, they are at the door—a sorrel of mustang blood, and the prettiest three-year-old Black Hawk we had set eyes upon for many a day. The road around Bolivar is the segment of a circle, the first part of which lies along the Shenandoah and the unused Slackwater Canal, bordered by

The Potomac above Harper's Ferry.

majestic cotton-woods, their wide, gaunt, flecked branches spreading weirdly over the dismantled Government Rifle-Works, the empty, crumbling canal, and the havoc that war and flood have made on every side. Midway of the ascent of the hill, the scenery, looking back toward the Ferry, is soft and beautiful, water and mountain toned by distance, and, in the foreground, the long, straggling street of the ancient town. As we reach the top, we pass the remains of the Federal fortifications and the deep, bush-covered valley where the balloon was kept secure from stray shells. Nearly three hundred houses stood upon the western slope of these heights, and now hardly a trace of them remains. From here we get a nearer and less elevated view of Loudon and North Mountains over a rich and well-tilled farming country. We return through the neat vil-

lage of Bolivar, created by the Armory. Its inhabitants, since its abandonment by the Government, still are loath to leave their homes, and find on canal or railroad wandering livelihoods.

With a sharp deflection to the left, we pass through Harper's Ferry and over the sounding plank-roadway of the railroad-bridge, creaking metallically with all its interwoven iron net-work. Our road is a narrow one, leading along the canal and past the old ferry-house, brooding under the beetling cliffs that overshadow it. As we looked at the placid, sluggish waters by whose walled margin we rode, there was in them but little suggestive of danger or of the tragic. But, as we heard afterward, at a spot that was then pointed out to us, was drowned the young son of the good old lady at whose house we were to stop.

Turning to the right, the ponies tug and strain up the steep roadway that ascends the mountain. Under the overhanging boughs of the chestnut and the oak we go; over tiny rivulets, and with a final pull, heavier than any yet, the panting horses come to a willing halt.

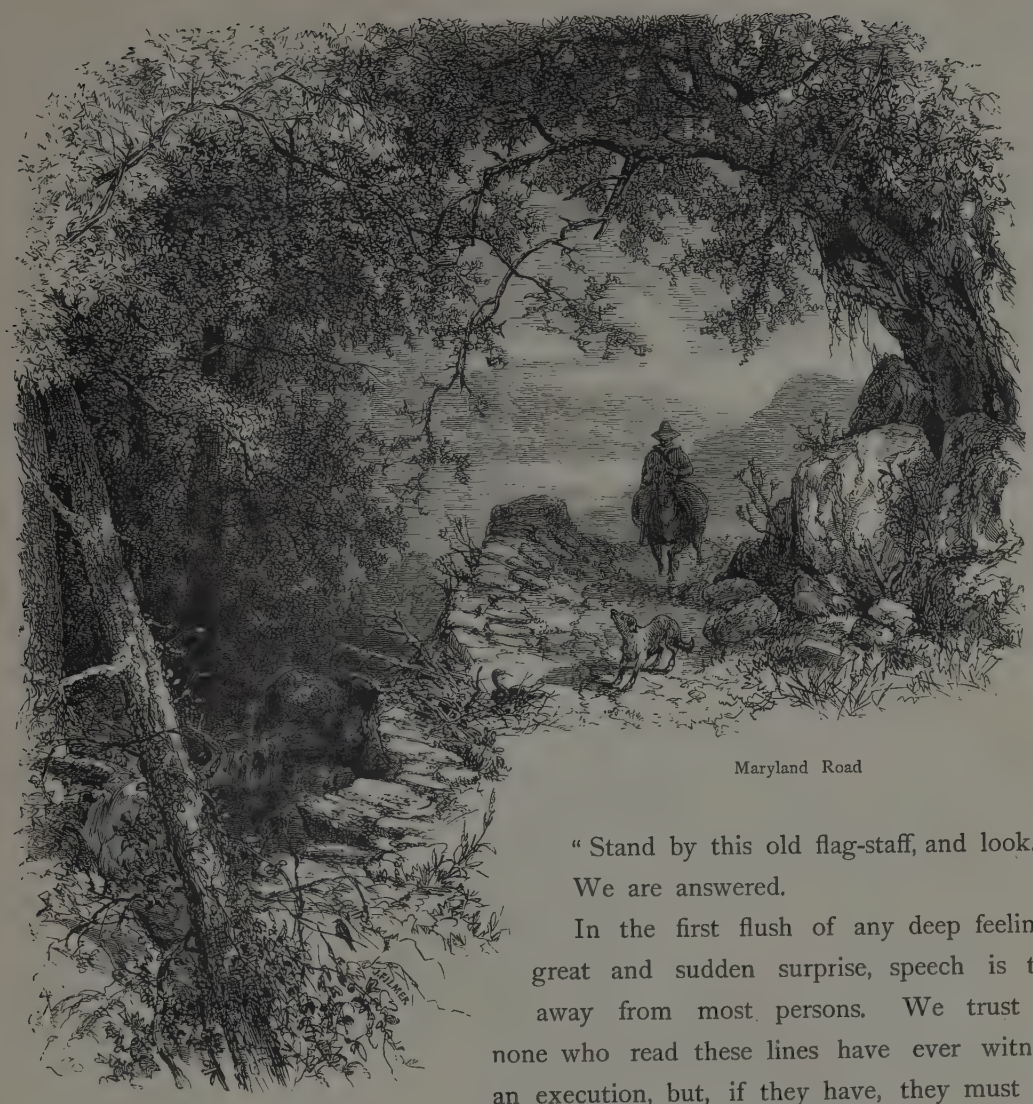
"Colonel Unseld, gentlemen."

White-haired, and with flowing, white beard, slow and deliberate of speech, as are many Virginians, the colonel greets us.

All who take carriages must stop here, and make the ascent from this point on foot. They may, therefore, congratulate themselves that a propitious Providence led Colonel Unseld to select this spot for a private and most hospitable dwelling. To those who rest a while in her parlor, Mrs. Unseld—Scotch-Irish by descent, with the shrewdness of the one nation, and something of the ready wit of the other—can tell many interesting incidents of the time when the shells whizzed high overhead from the stone fort on the summit, and the yellow flag of the hospital flew over her homestead, and in this very parlor lay the dead and dying. Upon hospitable thoughts intent, Mrs. Unseld placed before us peaches and pears, both of which ripen late at this elevation. She was sorry, she said, but her "pears this year were like the politicians." And, truly, so we found them. They were outwardly sound and healthy, and some few did not belie their looks. Take up one at random, however, and the chances were that it was inwardly rotten from the core to the rind.

The landscape below, seen from the north side of the Heights, tempts us to linger a moment, and then, plunging into the woods, we begin the ascent up a dry ravine that leads directly to the summit. We find out before long why so many persons are content with the tame views from the Ferry itself. We have been over other mountains, but the steady, knee-breaking climb up the nearly perpendicular shoulder of these heights is the hardest piece of mountaineering we ever accomplished. Heated, in spite of the cool breeze that is blowing, and tired, we reach at last the ultimate ridge.

"Can any view repay such exertion?"



Maryland Road

"Stand by this old flag-staff, and look."

We are answered.

In the first flush of any deep feeling or great and sudden surprise, speech is taken away from most persons. We trust that none who read these lines have ever witnessed an execution, but, if they have, they must have been painfully struck with the simultaneous and involuntary movement, the shuddering, audible drawing of the breath, as the drop fell. It is with pleasure as it is with pain. They are brothers, though the outward resemblance be so slight. The long, involuntary exclamation that from more than one of our party testified to the effect of the interminable stretch of valley and hill that bewildered while it delighted, was therefore but the fitting tribute to the magnificence of the view that, as we touched the crowning ridge, burst upon us. It is beautiful in its undulating, wooded slopes, its cultivated fields. It is grand in its mountains, huge, and black, and stately, in the distance, fading and melting in the haze, with solitary peaks jutting boldly out, breaking the ranges as far as the eye can follow. Through the valley between flows the Potomac, curving to the right, then deflecting to the left, and, with a long stretch by the base of intruding hills, lost to sight, only to

reappear, for the last time, a gleaming mass in the brown, blended landscape. Loudon Heights lie on the other side of the river, and beyond is the rich Quaker settlement of Loudon County, that blessed spot, where the land drops fatness, and poverty is said to be unknown. We look down upon the broken outlines of the Short Hills, half concealed from view, in which lies Lovettsville Valley, and, on the other side, the Valley of the Shenandoah. At our feet are the fertile farms, the tree-embosomed houses, the symmetrical orchards, and the brown, harvested fields of Pleasant Valley. We are at an elevation of thirteen hundred feet. At our side is the old flag-staff erected by the Coast Survey when they fell back to this point to gain some necessary bearings for the map of the Atlantic coast-line. All around are scattered the ruins of the war. At that time the whole apex was bared of its trees, and the old height lifted its head, a very monk among mountains, with a shaven crown and a narrow belt of timber midway of the summit. But the earth hastens ever to hide the scars made on her bosom. A sturdy and dense growth of shrubbery now protects this space, save where, around the flag-staff and the Old Stone Fort, the stone foundations and the scattered rocks that composed the walls show how the soldiers encamped here endeavored to shelter themselves from the biting winds of winter.

The broad rampart of the Old Stone Fort now forms an excellent post of observation. From it the view is unobstructed, except where the Blue Ridge, throwing out spurs here and there, mountain linked to mountain in endless variety of height and shape, rises and divides valley from valley. This Blue Ridge has another peculiarity besides the soft, enveloping, distinctive color from which it takes its name. It is not a continued line, but a series of mountain-ranges pocketed into each other. First one mountain will take up the elevation for ten or twenty miles, and then, in its turn, some detached height will continue the broken chain, only to give place to a third, and this to others, before the Susquehanna is reached. All along its course it forms the dividing-line of States and counties. From these heights we look, for instance, into seven counties—Jefferson, Loudon, Frederick, Fauquier, and Clarke, in Virginia, and Frederick and Washington Counties, in Maryland; and into three States—Virginia, West Virginia, and Maryland. Through all the scene the eye traces the Potomac, entering at the north, and flowing southeast; the white houses of the scattered towns, Martinsburg, Shepherdstown, Knoxville, Berlin, Hagerstown, and, on a clear day, following the road that winds over the hills—a yellow, wavy ribbon, now seen, now lost—Charlestown and Winchester. The horizon is bounded, to the north and west, by the Loudon and North Mountains, enveloped in a haze of smoky whiteness; and cultivated fields, checkered with square blocks of forest left for timber, lie as if in the hollow trough of two immense billows, whose crests are these swelling undulations of the land. The Potomac, coursing through sunlight or shade, adds beauty, and life, and changeableness. There would be a sombreness in the view that would detract much from its attractiveness with-

OLD BRIDGE AND MILL, ANTIETAM.—ANTIETAM ROLLING-MILL.—BURNSIDE BRIDGE.

out this beautiful river. Some one has said that a fire is cheerful because it is a live thing in a dead room. So a river is alive, ever flowing, and ever changing. It is to a level landscape what the eye is to the human countenance—it lights it up, and gives it expression.

Through all this sweep of vision there are no signs of the ruin that war brought upon the fair Valley of Virginia. The once fenceless farms are again broken here and there into fields and pastures. Though General Sheridan boasted that a crow flying over this region would have to carry its rations in its beak—and the boast came very near being fulfilled—bounteous harvests and well-stocked barns now testify to the thrift and energy of the people. The towns have suffered, and still show the marks of the devastation, but the open country is still the same as before the armies marched and countermarched with destructive tread over its surface. What man has builded, man has destroyed, and, in many cases, utterly; but the fair and smiling fields are as eternal as the mountains that shelter and protect them.

Reluctantly we leave our breezy station, and descend by the longer way around the shoulder of the ridge overlooking the Ferry. A few moments' rest at the hospitable home of Colonel Unseld; then down the steep and tortuous road at a rattling pace; along the still waters of the canal, looked at now with a new, shuddering interest as we think and speak of the tragedy that has happened in them; by the Potomac, where Lehman was shot; over the bridge, with thoughts full of the beauties of mountain and river, and a longing like that which draws a lover to his lady's side, to see them all once again.

The evening falls among the mountains, calm and peaceful. The huge shadows of the dusky heights overcast the town and river. If it is in the season—for artists, like migratory birds, have their time for appearing in different places, and for disappearing—some wandering artist from Baltimore, Washington, or, in rarer cases, New York, may stroll in with sketching-portfolio and camp-stool, and exhibit to the wondering natives the counterfeit presentment of familiar scenes.

The night darkens, and the Ferry puts on another aspect, both novel and singularly beautiful. The mountains, dimly seen, close in upon the murmuring river and the quiet town. They rise, still sombre and black, unrelieved by a single gleam of light, and shut out the sky, except immediately overhead, or where the long reach of the river has made a break in their continuity, which the eye follows, and down which the twinkling stars, reflected in the water, glitter brightly. Along the foot of the Maryland Heights, bright, golden-rayed lights creep in slow motion. They are those that show the path of the innumerable boats that convey the freight of the Chesapeake and Ohio Canal —that old, expensive, and until lately unremunerative work of internal improvement, begun under the auspices of Washington, and laboriously pushed to completion. Occasionally a skiff crosses the Potomac, its lamp casting a long, flashing, illuminated path before

it. Over the bridge, and where the perpendicular, barred, and veined rocks of the Maryland Heights come down to the river, the red signals that denote the coming of a train suddenly appear, and presently, with a rumble and jar across the bridge, the loaded cars slacken speed, stop a moment, and take up their usual hurrying, anxious, noisy crowd of passengers, many of whom have come by the Winchester and Potomac road, which connects here. Mothers, who have been sitting, the very images of patience, hastily clutch babies and bundles; those exasperating, cool persons, the experienced travellers, quietly push ahead, and, obtaining the best seats, turn over the ones next them, fill them with carpet-bags and overcoats, and coolly ignore all inquiring glances; the shrill whistle

Mill on Antietam Road.

awakens the answering echoes from the surrounding hills, and the train carries its burden westward, its long array of shining windows flashing on the river and growing dimmer and dimmer, until, all confused and blended, they disappear beyond the rounded western hills. Again the quiet is only broken by the ceaseless ripple of the Potomac, as it frets and chafes over its obstructions, and by the weirdly-musical horns of the boatmen as they play fantastic tunes, as a warning of their approach, to the keeper of the lock.

Wandering off from the Ferry by the banks of the river, by mountain-streams, often falling in graceful cascades, or pursuing their course along the indented base of

the Blue Ridge, many forest-roads present little "bits" of striking beauty dear to the eye of the artist. The road to Antietam and the battle-field of Sharpsburg is especially rich in these cabinet-pictures set in Nature's framework.

The drive is along the mountain-side from Pleasant Valley. It runs for part of the way under overhanging rocks and above deep-wooded ravines, into which foaming cascades leap, sounding in their far recesses. All along the elevated road beautiful views of mountain and valley open, ever-varying.

After the mountains are left, the Antietam gives a different scenery. Old mills border the sleepy stream—called, in the speech of the country, a "creek." Quaint stone bridges span it, and, near its juncture with the Potomac, stands the rambling, uneven range of buildings which form the Antietam Rolling-Mills.

On the road leading from Pleasant Valley and that from Boonsborough came the army of McClellan to the battle of Antietam, or Sharpsburg. These two roads are the only ones that cross the Antietam on stone bridges. The Burnside Bridge is on the Pleasant-Valley road, and here some of the most desperate fighting of the day occurred. It was on the extreme right of Lee's line. Sloping down to it are the heights of Sharpsburg. It was of almost vital importance to Lee to guard this flank. If it should be doubled up, and the Sharpsburg Height in the hands of McClellan, the Shepherdstown Ford of the Potomac would be closed to his retreat. The Confederate forces, under the command of General Toombs, held the bridge, and were supported by batteries posted on the hills in the rear. Burnside was ordered to attack and carry this bridge at all hazards. The attack was commenced at eight in the morning. From that time until mid-day the bridge was alternately in the hands of each of the opposing forces. Couriers from McClellan urged Burnside to "carry the bridge with the bayonet," and to capture and hold the height beyond. At four in the afternoon a final attack captured it. It was then too late. The command of A. P. Hill had arrived from Harper's Ferry, and the Federal advance was checked. McClellan, after the terrible fight that had continued throughout the day along the whole line, was too weak to reënforce Burnside. Thus both sides rested at nightfall. Lee then retreated by the Shepherdstown Ford into Virginia.

Harper's Ferry, long before the war brought it conspicuously to the attention of the world, had derived an extensive fame from Jefferson's description of it. This description the visitor of to-day is apt to believe exaggerated. But Jefferson's account was written before we were familiar with all the natural wonders of our land, and hence, while its beauties are very great, it is scarcely "one of the most stupendous scenes in Nature;" nor are we apt to believe a view of it "worth a voyage across the Atlantic." It must rank among the numerous striking natural beauties of our land, inferior in magnitude to many of the far Western cañons, but acquiring an interest from its historical associations, which more than compensate for its secondary place in our gallery of scenic wonders.

SCENES IN VIRGINIA.

WITH ILLUSTRATIONS BY WILLIAM L. SHEPPARD.

Interior of Natural Tunnel.

PICTURESQUE America may be said to find almost an epitome of itself in the State of Virginia. Her scenery—infinitely varied, beautiful exceedingly, and sometimes truly grand—repeats in her own boundaries features which would have to be sought in places widely separated. Here, indeed, are no Alps, no Matterhorn to tempt Whymper or Tyndall, and no glaciers to study; nor do those works of Nature find a parallel on this side of the Mississippi. But from Harper's Ferry to the farthest southwest corner of the State there is literally a world of scenic beauties, ravishing to the artist, and inviting to even the dullest traveller or sight-seer. Let us glance at a few of the more striking of these mountain-pictures. The marvels of the Natural Bridge, and the hitherto almost unknown wonders of Weyer's Cave, have been illustrated and described in former papers in this work. Our present series gives a varied selection of other scenes, some of which are almost as remarkable as the better-known features of the State.

The Natural Tunnel, in Scott County, is the first point to which we will conduct the

NATURAL TUNNEL.

reader. The variety and beauty of the forest-growths constitute the most striking peculiarity of this southwestern portion of Virginia—one might say, the only striking peculiarity—and hence, no doubt, the surprise which the Tunnel excites when it is seen, albeit the spectator has been in momentary anticipation of the object of his quest. This surprise recurs at every visit to the Natural Bridge, and the Tunnel is a similar formation, not so lofty in its arch, but longer and more tortuous in its course through the hill or shoulder of the mountain. In the one case there is a short and nearly straight tunnel; in the other the tunnel is long and very crooked; in both cases the country-road runs over the tunnel, the traveller crossing it unawares. Stock Creek, a tributary of the Clinch, whose limpid waters have repeatedly wetted the hoofs of our horses in our zigzag course hither, has forced or found a passage through the ridge which stretches athwart the narrow, deep valley, and, in so doing, describes what railroad-men would call a "reverse curve," one hundred and fifty yards in length. Thus, although the arch is seventy or eighty feet high, the light is intercepted, and, even when the sun is at its zenith, the passage of the Tunnel is attended with difficulties. At other times, when the rising or declining orb lends but a partial and imperfect illumination, the subterranean traveller, plunged in Cimmerian darkness, cannot repress a feeling of genuine horror as he toils through the central portion of the curve, and, as he emerges, hails the sunshine with rapture, exalted and prolonged by the precipices of naked rock ascending sheer three hundred feet above and around him; while higher yet rise the verdurous crests of the forest-crowned summits, and above all bends the intense, unfathomable blue of the welkin. A master of hyperbole might exhaust his store of rhetoric upon this spectacle, which the man of plain speech would be content to call very wonderful. In truth, it is a curiosity of Nature—unique, if not sublime. When the Cumberland-Gap Railroad—not yet begun—is completed, and when West meets East at Bristol-Goodson—the proposed starting-point of the projected road—when that bright day shall dawn, the Natural Tunnel will have countless admiring visitors, most of whom, unfatigued by horseback-journeying over roads none too good, will be content to linger longer than we did. It is said that the projected road *must* pass through this tunnel, there being no other practicable route. If this be true, and if thereby this great wonder be seriously impaired by cutting off one or the other of its curves, then the lover of the picturesque may hope that the road, serviceable as it may be to travel and traffic, will never be built.

Leaving the Tunnel, which, after the Natural Bridge, is undoubtedly the most imposing *lusus naturæ* east of the Mississippi River, we retrace our way along the Atlantic, Mississippi and Ohio Railroad. Around us are mountains of every conceivable shape—all the rounded outlines, all the frightful angles, incident to such scenery—bays and nooks of greenery, reaching far off into coves; vales and chasms; bald knobs, dotted with the skeleton trees; jagged precipices, exposing the unhealed stumps of

New River.

Sycamore on New River.

gigantic mountain-limbs torn off as by seismic violence; mountains lapped and dove-tailed within mountains, range above and beyond range, in seemingly endless succession, wooing us to stop, and flitting all too quickly past as the train flies on.

Debarking at Central Depot, we start thence on horseback for a trip down New River, crossing it near the station. The river flows silently here, but with a subtile

Great Falls, New River.

sort of force, between banks lined with sycamores, which trail their branches in the water in many instances. Masses of brown-gray rock lift their heads above the foliage in many places, but the banks soon fall away, and the stream, gliding along the low-lands, divides with its silver breadth the rich alluvium which the plough has upturned to receive the corn. Expectant crows, doves cooing on the dead branches of the belted

trees, and the mists lifting from the distant mountains, enliven the solitude. The ferryman never has any small change, and has to run, or rather walk, to his house to hunt it up out of the wads of fractional currency hidden carefully away in some ancient sock or stocking. This proves no hardship to the horsemen, whose eyes are charmed with the varied landscape, now concealed and anon disclosed by the coquettish pranks of the morning vapors.

We take a short cut athwart a bight, or loop, of the river, following a narrow path, the main road having been fenced quite across on account of some dispute as to the right of way. Farmers become indignant because their fence (a few rails) is taken down to give passage to the artist and his friend, albeit the said rails are carefully replaced as good as new. At last, regaining the main road, which goes over a ridge adorned with noble timber, we quicken our pace, observing, as we pass rapidly along, that even the local names are misspelled on the half-rotten sign-boards. We meet no travellers. A negro-boy, drifted hither from Mississippi by the vicissitudes of the late war, undertakes to be our guide, but, becoming disgusted with the roughness and hilliness of the road, soon leaves us. We press on. A lonely hut in a clearing on the hill-side; naked negro-children, staring; a dog in convulsions of barking; a plant-patch for tobacco-burning, in a hollow, among the stumps of half-felled trees; a church in a grove at the foot of a hill, well built of brick, but as destitute of attractions as the sternest Puritan could wish, after the manner of country-churches in Virginia—constitute the features of this lonely road.

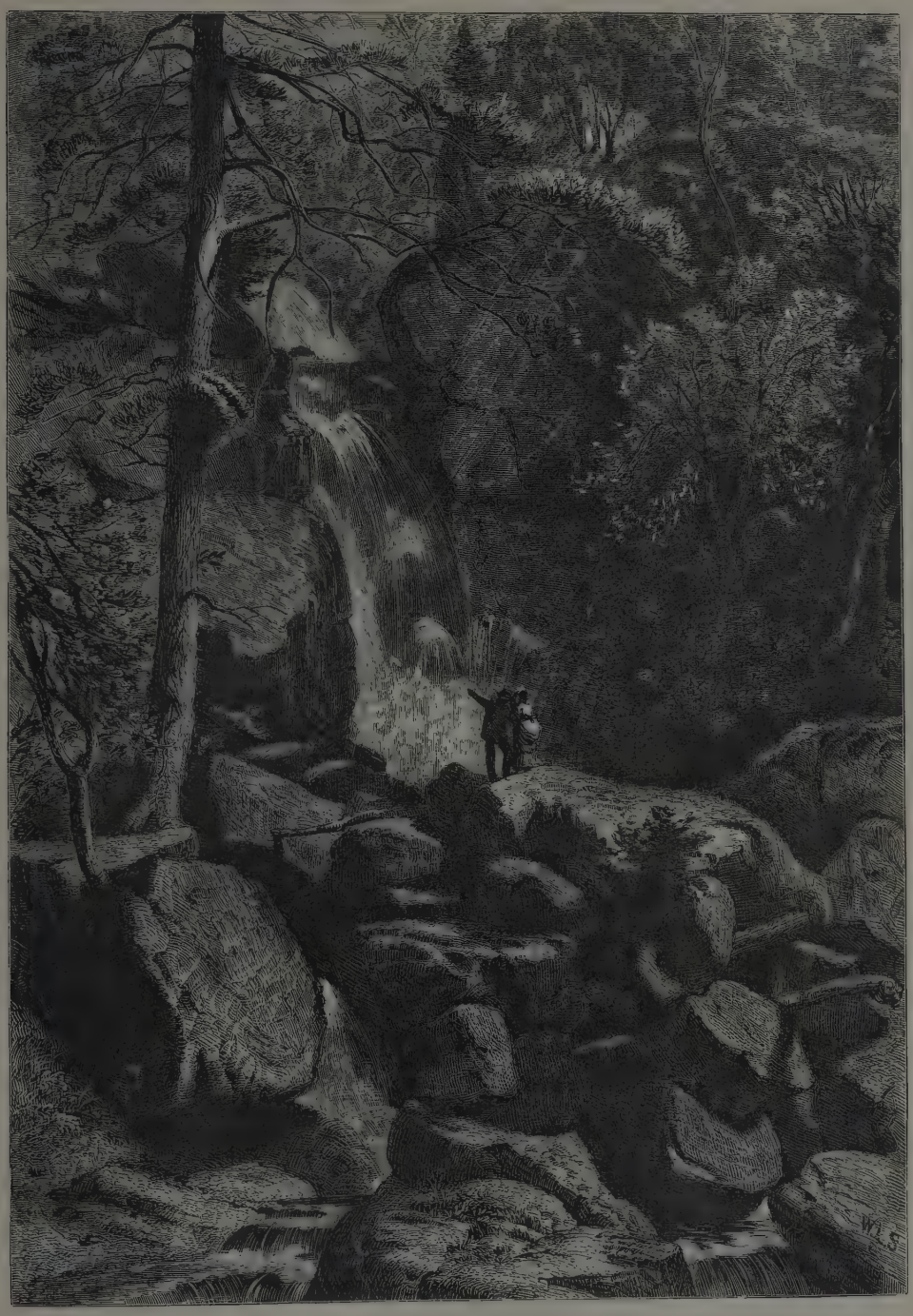
We go through five gates in two miles. A heinous offence in Virginia it is to leave a gate open, and a case recently reported on this road—the only one that leads up from the river on this side—has agitated the whole community. Again we encounter the river, the road narrowing very much, and winding under steep bluffs; the river still flowing majestically, and the opposite banks getting higher, with no visible outlet for the stream. Now the road runs on the water's margin; and now it mounts far above, and the hoofs of our steeds are level with the tops of the white-and-brown-barred sycamores. Rocks become more numerous in the bed of the stream, interspersed with immense stranded logs, the beams of houses, and the wrecked mill-machinery, brought down by the great flood of 1870. Here the water glides over ledges or eddies under willows; the mountains become higher and steeper—higher even than on the Hudson in the Highlands—and are thickly clothed with woods. Here and there, great streams of loose stones—moraines, most likely—poured out as by a superhuman hand, extend away up the mountain-side. Houses are few and far apart; the people stare intently, are slow to return a salute, and do not even ask the news. Civilization is far behind us. Mountains tower on every hand; there is seemingly no escape for the imprisoned waters, lake-like here, still as death, enchanted and asleep. The solitude and grandeur of the scene become oppressive; respiration is almost impeded. We push on. A murmur is heard; it becomes a roar; we turn a corner, and behold—the Great Falls!

NEW RIVER AT EGGLESTON'S SPRINGS.

The river, half a mile or more in width, foams and dashes over the ledges formed by the peculiar stratification, well shown on the mountain-side in the engraving, with great but not unmusical violence in some places; while in others it slides between the huge rocks with a swift, treacherous look, which fascinates the observer. Boats equipped

Anvil Cliff.

with oars at both ends shoot these dangerous rapids, guided with consummate skill by the boatmen, who are generally negroes. Getting back is a toilsome business, compelling the men frequently to plunge waist-deep in the powerful current, in order to push their boats up by main strength. The delighted visitor may linger long at the Falls; but, our sketching accomplished, we follow the course of the beautiful river, which soon re-



Purgatory Falls, Head-Waters of the Roanoke.

sumes its placidity, although the actual velocity has not been greatly diminished. The scenery is literally magnificent, and of the character already noted, except that at intervals high crags tower above the stream, their gray, russet, and ochreous tints harmonizing admirably with the foliage.

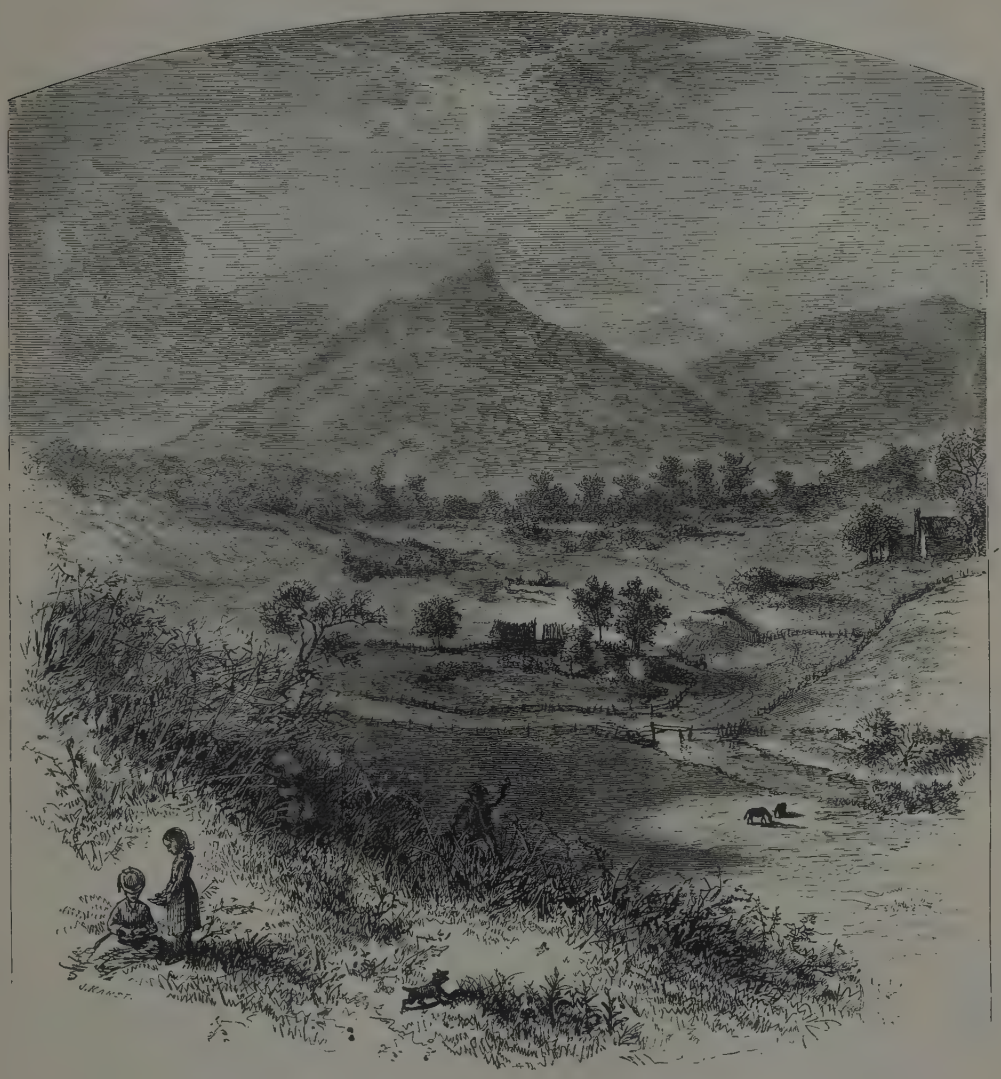
At the point shown in the accompanying engraving, the river, lapsing once more into its lake-like aspect, composes itself into a picture which has an almost *studio-like* attention to the ordinary rules of composition, more striking in color than in form, but still most beautiful—the dreamless, perfect rest, after the strife and contention at the Falls. A singular feature of the landscape is the Lombardy poplar, a tree fast disappearing from Virginia. Mr. Jefferson is said to have introduced this lovely, home-suggesting tree into America It looks out of place, and lost, in these wild fastnesses.

An odd contrivance, at a farm-house on a high hill, attracts our attention. A range of posts, like those of a telegraph-line, runs down the hill to a spring. Wires are stretched along these posts, and a bucket on a traveller is hauled when full from the spring, slipping back, by its own gravity, when emptied, and stopping immediately under the spout, so as to be refilled and ready for use whenever needed.

Abruptly parting from the river, it being impossible to get along the banks, where cliff after cliff protrudes into the water, we make a circuit of several miles, and come suddenly in sight of the river again. The scene, viewed from the top of a lofty hill opposite Egglestone's, or the New River White Sulphur Springs, is most remarkable. High hills enclose the place; back of these are mountains, and back of all the great Salt-Pond Mountain—a slumbering Titan. In the foreground, a hill-top, with gnarled and picturesque trees; beneath, the tranquil, gleaming river, shortly lost to sight in the sombre mountains; and, immediately opposite the spectator, the rugged, riven, and weird Anvil Cliff lifts its awful but not repulsive front. Descending the winding pathway, under tall, fantastic rocks, we reach Egglestone's Ferry, and halt in mute admiration of the scene before us. The sketch leaves little to be added by way of description. By an old gentleman of the neighborhood, who, fond of the classics, as most of the educated old gentlemen of Virginia are, the natural arch in the rock and the pinnacle on the left were designated, years ago, respectively Cæsar's Arch and Pompey's Pillar. The river being thirty or forty feet deep, a ferry-boat, impelled by huge oars, is brought into play. The banks are lined with trees, mostly sycamores, but there are also some fine elms. Among the former we find a number of curious shapes, an example of which is given in the engraving. The banyan is suggested in this singular formation; and the support given to the huge limb-trunk which impends over the water, lends a coloring to Figuier's easy faith in plant-sympathies, which almost simulate intelligence.

Below the ferry, on the right, looking down the stream, rises the Anvil Cliff, the height of which, ascertained by triangulation, is stated to be two hundred and ninety-six feet—an over-estimate, probably. The cliffs are elevated in immense laminæ, and in a plane generally oblique to the stream—their color sombre gray, with brighter belts and dashes of dirty white; their summits black and riven, capped by twisted and storm-stained cedars. Mighty forest-trees are inserted between the crags; and in certain places the accumulated washings of the stream have formed, at the base of the cliffs, little

levels in terraces of lively green, which afford foothold and nourishment to bright-leaved and gracefully-bending maples. But the general aspect of the scene is savage and Dantesque. At sunset, the tops of the cliffs are illumined with brilliant gold or bathed in vivid red, as the character of the evening may be, while all below is enveloped



Peaks of Otter.

in cool, purplish shadow—a noble and exquisite scene, worthy in form and coloring of the best master in the land.

Inconspicuous in itself and scarcely worthy of such august company, the "Anvil," which gives the name to this stately pile of rocks, is, nevertheless, much larger than it appears to the eye, being four by nine feet in actual dimensions. An adventurous Baptist preacher once clambered down the cliff, and, standing upon the giddy point of the

Anvil, delivered, as the legend avers, a sound doctrinal discourse. If so, the loftiness of his style and the height of his argument must have been considerable. Near the foot of the cliff from which the Anvil juts, a stream gurgles between the fallen masses of rock. It is the outlet of a stream, which disappears strangely on the mountain-side in rear of the massive pile. Indeed, the behavior of the water hereabouts is very singular. It is troubled by devils rather than by angels; sending up great bubbles continually; and, on two occasions in the last two years, threw itself, geyser-like, full twenty feet into the air. A tattered, dull-headed fisherman, who daily plies these solemn waters in search of the excellent white cat-fish which abound at certain seasons, was frightened nearly out of the little wit he had by one of these startling ebullitions.

New River is justly ranked among the wonders of Virginia, and the impression left upon the mind after a visit to it, however solemn and even gloomy it may be, is one from which we would not willingly part—so deep is it, and so removed from the common order of quickly-effaced remembrances.

A rough ride in a wagon, whose springs were a contradiction in terms, brings us back to the railroad, and the train bears us eastward to Alleghany Station. Here the Roanoke River meanders so that it has to be crossed five times before we reach the Alleghany Springs, five miles from which one of the streams which form the head-waters of the Roanoke, precipitating itself over a steep ledge, makes what is known as Purgatory Falls. Why so called does not appear, unless, in the mind of the originator of the name, there was some obscure idea of purgatorial or expiating merit in climbing up the gorge which terminates at the cascade. Few approaches to a scene so beautiful are more picturesque. The detached masses of rock which impede and divide the stream are of enormous size, and out of all proportion to the volume of water, though that is by no means small. The large tree-trunks lodged against the huge rocks, which are not bowlders, but irregular solids, tell the fury of the torrent when at its height in rainy seasons. The place has a very "snaky" look. A chance companion of the artist suggested that if he was a good "snake-fighter," he had better take the lead. Armed with that formidable but mysterious club, the sketching-stool, the artist did lead, but happily no snakes appeared. The water falls about seventy feet. Tall hemlocks and maples keep the gorge in a tender half-light, broken at mid-day by glaring rays, that give a magical charm to the place. An accident occurred here some years ago, by which a young gentleman, a visitor at the springs, lost his life in falling from a tree. With questionable taste, his name has been given to the falls, but has not superseded the original title, as given in the text.

Returning in an omnibus to the station, an irrepressible person bent his whole mind to the discovery of the use to which the strange instrument carried by the artist could be applied. Others had repeatedly gazed, but he boldly questioned:

"To set *in!* How on earth kin a man set *in* a stick?"

NATURAL TOWERS.

It was unfolded.

"But how kin you set on three pints any more'n one?"

The canvas seat was explained to him.

"Well!" drawing a long breath, "ef I didn't think you set in a cheer and draw'd your picters out uv a window uv a house on wheels, I'll be dog gone! You ai'n't no daggerertyper, then?"

The artist disclaimed that high honor.

Still going eastward, we stop at Liberty, in Bedford County, in order that a sketch may be made of the famous Peaks of Otter. The view, taken a short distance from the village, is much more accurate than any heretofore printed. The peaks have been made

Natural Towers.

familiar by repeated descriptions. Ten miles distant from the village above named, the higher of the two is five thousand three hundred and seven feet above the level of the ocean; and the view from its top is truly magnificent. Eastward stretches an interminable plain, farther than the eye can reach; while to the west a tumultuous sea of mountains extends on and on to the remote horizon. This grand panorama, once seen, can never be forgotten. A hotel of good repute, situated half-way up the taller peak, was burnt last year, but is now in process of reconstruction. It is a favorite and delightful summer resort.

From Bedford County to the limestone region of the Valley is our next remove. Here caves and curious formations exist in numbers, surpassed only by the country

around the Great Lakes, but these we have already illustrated in an article on "Weyer's Cave." In Augusta County are the Natural Towers. A glimpse of them is caught in driving down the road that skirts the North River. No cliffs or mountains near at hand suggest the proximity of this wonder. Across the river is seen a plain skirted by a range of wooded hills of moderate height, and, just at the foot of this range,

Jump Mountain.

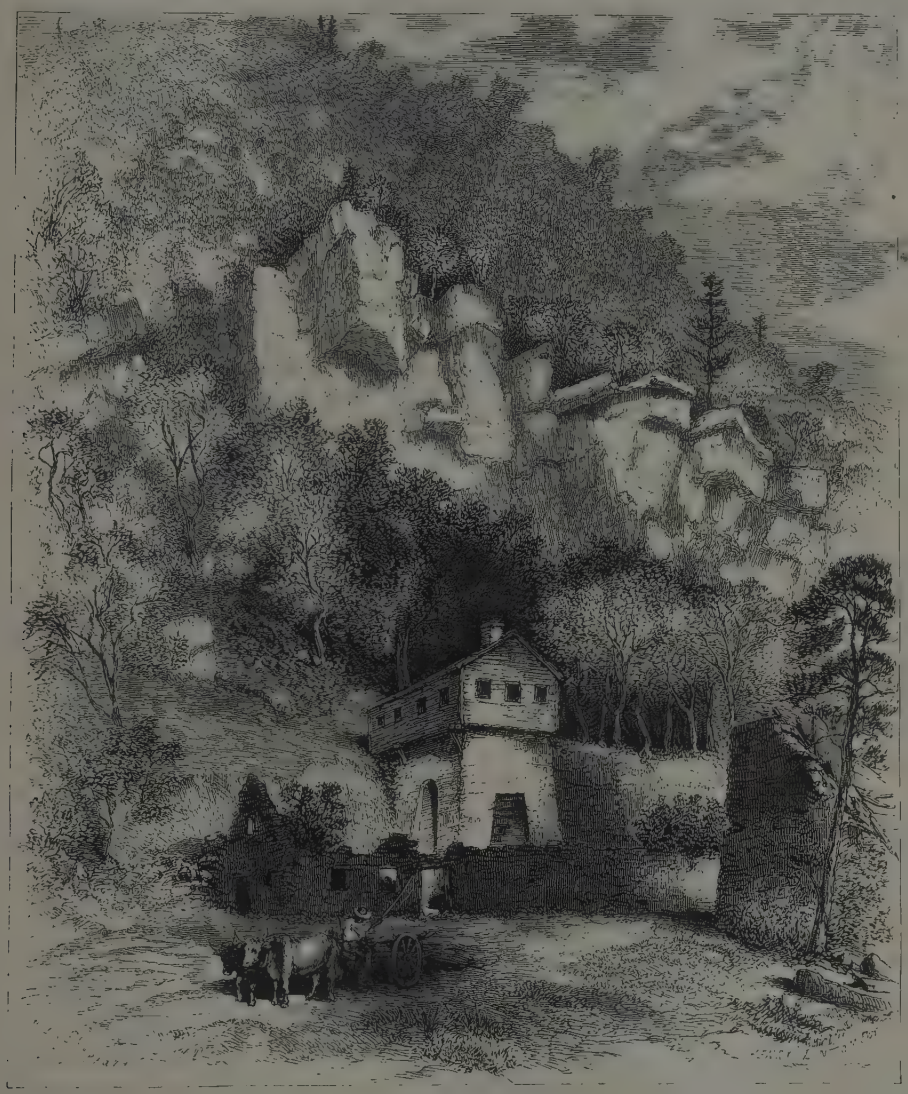
the Towers rise straight up from the cultivated field. The illusion is perfect; any one would mistake them for a ruined work of human hands. No other rocks are visible. From a distance, the ragged peaks of the Towers are transformed almost without an effort of the imagination into crumbling embrasures and machicolations. The first aspect is that of the large engraving, but, following the road, the observer is brought to the other face, and here the resemblance to a feudal ruin, the curtain-wall, with flanking

towers, and low, central archway, is exact. It would hardly be a surprise if, issuing from the gateway, a knightly *cortége*, in glistening helms and hauberks, with pennons flaunting gayly, should file off to the neighboring highway, and proceed to levy toll upon a be-

Goshen Pass.

lated and unprotected wagon-train laden with "Swope's Family Flour." A nearer inspection shows that the inner side of the pile is really attached to the hill-side. The colors are varied in horizontal bands, and, from the seams which appear at almost equal intervals in their height, the Towers are apparently the result of successive depositions.

Bidding farewell to the Towers, we proceed westward along the Chesapeake and Ohio Railroad to Goshen Pass. A stage hurries us through at night, for we are to sleep at the Rockbridge Baths, visit the Jump Mountain, and return to the Pass. We see the overhanging crags, the high, naked summits, the black masses of foliage, and hear the melancholy winds soughing in unison with the invisible river rushing far below—that is



Clifton Forge.

all. It is simply grand, but we rattle on to the Baths, where we have things all to ourselves, the season not having commenced.

Early next morning we mount the buggy and are off for Jump Mountain. Thunder-showers drag over the top of the "Jump" as we follow the road, prospecting for a good point of view, and the mountain appears to decide not to allow his portrait to be

taken that day. Dismounting, we rummaged an Indian mound, a very mass of bones, once quite distinct, but nearly effaced now by freshet and by the plough. The legend goes that, in far-off days, ere the white intruder came, there was a great battle here between the Shawnees and Cherokees. A red maiden watched from yonder mountain-height the varying tide of combat, and, when her lover fell, *jumped* from the beetling cliff—hence the name. The lorgnette which even Love's piercing eyes must have used to detect certain death at such a distance has not been preserved in any museum; nor did we stop to search for it, but, plunging into a lonesome gorge, found the desired point of view, and at the same time a homely dinner in the cabin of a hospitable old mountaineer, who refused pay. In answer to a question from him as to the facts of the matter, we told him that Richmond *had* been damaged by the war! Some rumor had reached him to that effect.

The western base of the Jump abuts on Goshen Pass, and the ascent on that side is so gradual that even ladies on horseback, during the Springs' season, ride to the edge of the cliff, five hundred feet perpendicular, which abruptly breaks the contour of the mountain. A prodigious stream of *débris*, the result of the forces which escaped the mountain's face, rolls from the base of the cliff nearly to the foot of the mountain, barring approach on this side. We did not even attempt it, but, trotting homeward, watched the blazing splendor of the sunset upon the lofty monarch's head, while the cool twilight of the valley enveloped all about our road.

On the morrow we are promptly at the Goshen Pass and through it—a narrow gorge, the like of which for length and depth is not in all Virginia, for it extends nearly nine miles between its frowning walls! At its southeastern entrance a spring of sulphur-water gushes out of a rock in the middle of the stream which traverses this Cyclopean gorge. The river-waters, pure and sweet, flow around the Acherontic pool, as if shunning contact with a liquid of so infernal a savor that it is perceptible at a great distance. Rude houses hard by are empty now, but tenanted in midsummer by neighborhood folk, who bring their own outfit and rations, and stay weeks, such is their confidence in the curative virtues of the nauseous fountain.

And now we are fairly within the Pass. Words are of little use, and even the pencil fails, for that can give but one side at a time of this gigantic and horrible chasm. Overhanging crags, black and blasted at their summits, or bristling with stark and gnarled pines, tower in places into the very heavens, six, seven, eight hundred feet above the stream. Lower down, monstrous rocks threaten to topple and crush the foolhardy wayfarer who ventures beneath their dreadful masses. The roadway is in places walled up from the stream, which flashes deep down beneath him. The place is "uncanny" enough. A bear and cubs, killed here recently, remind the artist and his friend that to be devoured by beasts would be no unfit penalty for intruding into so wild a scene. Yet, in the midst of this savagery, a squatter's log-hut, a crop of stumps and

RAINBOW ARCH.

smoke-grimed children, a dirty mother washing dirtier linen, and a lank father, dirtiest of all, armed with a gun of endless barrel, in search of a perfectly-fresh dinner, furnish elements of the ludicrous which are all the more enjoyable by contrast with the rugged and gloomy surroundings.

Quitting reluctantly the Pass, we are whirled along the new highway to the West, the Chesapeake and Ohio Railroad, over vast embankments, through yawning tunnels, and all along by delicious bits of scenery. The mountains close in as if to bar the way, then flit behind, displaying quiet meadows and charming vales. Striped convicts, clinking at the drills, poise their sledges as we pass to catch sight of the very antithesis of their restraint—the rushing locomotive. A girl in ample Dolly Varden, and a boy in one garment, and that brief, at a house on the road-side, suggest the union of the two extremes of Art and Nature. Clifton Forge is our destination. We arrive as the mists, slowly assembling in the hollows, begin to crawl to their rendezvous on the mountain-side. Looking into the gap, a single glimpse, the blue is of an intensity which the artist would hardly dare to put on his canvas. We find lodging at a tavern of the ante-railroad time, owned by two bachelor brothers, one of whom is an original. He tells us that game is so abundant that foxes are hunted on foot in the adjoining mountains, and describes the gray fox as more "ambiguous" than the red—little thinking how expressive the term is!

Jackson's River, flowing between the sundered mountains, unites two miles below with the Cow-Pasture, to form the historic James. The stratification here is most rare and strange, describing the arc of a circle, and the contour of the opposing faces on the two sides of the river being so perfectly true that a projecting rock on the one side has, exactly opposite, the recess from which it was apparently torn. Speculation as to the origin of this singular formation must be left to the geologists.

The arch rises two hundred feet above the level of the stream, and is known as the Rainbow Arch. The whole scene is lovely. Graceful trees drooping over the clear water, an abandoned furnace, and the ruined piers of a long-swept-away bridge, add very much to the natural picturesqueness of the place. The view in the Forge Gap, combining the wreck of rocks and the ruins of man's handiwork, with foregrounds, middle-distances, and horizon-lines, finely balanced everywhere, is surpassingly beautiful. As you look up at the mountains, or along the stream which falls over the dam (built thirty years ago, when the forge was at work), the grandeur and loveliness of the picture bear an ineffaceable impression. Negroes, and others who ought to know better, believe that the cliffs that overhang the Forge are *chained* to the mountain-side—a belief which grew out of a playful remark made years ago by our humorous host to a nervous lady who feared the rocks might crush the workmen employed by the iron company which then existed. The James River and Kanawha Canal, if ever finished, is to pass through this gap.

We append to our series of Virginia scenes a view upon steel of the Chickahominy. This now historic stream was hardly known outside the limits of the State previous to the war; and yet there is much that is interesting about it, not only to the lover of the picturesque, but to the observer and student of Nature. The stream is a tributary to the James. Its volume is inconsiderable until it nears Richmond, and it is navigable for some twenty-five or thirty miles only from its junction.

To the physical geographer the Chickahominy is interesting, from the fact that it is the northernmost locality that retains features, in its flora, which are common on the rivers of the Carolinas and the States farther south, in company with the growth of the colder climates. The cypress here protrudes its curious roots, and the funereal moss trails from the trees. The beech sends its horizontal branches over the darksome waters; the maples, so brilliant in their autumn foliage; and the gum-tree, more gorgeous still at the same season, with its rich variations from vermilion to royal purple—here keep company with the Southern interlopers. Vines encumber the trees, and harassing bamboo-thickets bar the way on the higher banks. The columnar gum-trees, in most cases, rise from an intertwined assembly of arched and knotted roots, especially where they are liable to be washed by the overflow of the stream. These arched bases have sometimes a clear distance from the earth of three and four feet, and constitute a unique feature in the forest. Immense masses of *débris* washed down by the freshets lodge against the standing timber, and the stream is bridged in hundreds of places by the trees which have lost their equilibrium from being undermined. The river contiguous to Richmond is invariably spoken of as the Chickahominy Swamp; and here, in effect, it is a swamp. The main stream, with its coffee-colored water, is well defined, but in many places, for a quarter of a mile on both sides of it, the ground is a slimy ooze, affording a very unstable footing. Where this ooze exists, it is covered with a dense growth of water-plants, generally of the peculiar whitish green found in plants little exposed to the light of the sun.

The Chickahominy is the chosen abode of all the known varieties of "varmints" of that region. The raccoon can here ply his trade of fisherman for the cat-fish and pike, or raid upon sleeping creepers or young wood-ducks. The "possum" has store of gum-berries, with the same variety in meat-diet which his conocturnal fancies; otters are still to be found; muskrats innumerable, and snakes—some of the aquatic species beautifully colored—in proportion. The wood-duck, of splendid plumage, flits like a prismatic ray over the brown water, and, though web-footed, builds his nests in the towering trees. In fine, the Chickahominy cannot fail to attract the artist and naturalist; it always would have done this, but now the added interest of historical association brings hundreds to visit its banks; and the stream which, heretofore, had but scanty mention in the common-school geography will find a place in man's record beside the Rubicon and the Tweed.

NEWPORT.

The Walk on the Cliff.

THE original name of the island on which Newport stands was Aquidneck, or the "Isle of Peace," and the present title was given to it because of its natural resemblance to the Isle of Rhodes, in the Mediterranean. It is hard to believe that, more than a hundred years ago, this was, with one exception, the most important port of entry in the American colonies, with two hundred vessels engaged in foreign trade, three or four hundred more employed in distributing the products landed here along the shores of our own land, from Massachusetts to Virginia, supplying the wholesale merchants of Boston, New York, and Philadelphia, with their various stores, and with a regular line of packets running between Newport and London—not less than twenty-two hundred seamen at one time sailing from this harbor. As long ago as 1728, Bishop

Berkeley writes that "Newport is the most thriving place in all America for bigness. I was never more agreeably surprised than at the sight of the town and harbor." In those days New-Yorkers were sometimes admonished that, if they only had the enterprise of the Newporters, with their natural facilities, they might, in process of time, become a formidable rival in trade and commerce!

Merchants built stately mansions by the water-side, some of which may still be seen, with their wainscoted walls, mahogany stairways, marble mantels, and tiled fireplaces, indicative of a period when the warehouses were not sufficient to contain the wealth of products that was discharged at these wharves, and the streets and sidewalks were — a sore temptation this must have been to the boys of the period—often lined for days with the tropical fruits of the Indies. Gentlemen of wealth and culture had their country-seats in the vicinity of the town, surrounded by flower-gardens, and orchards, and fish-ponds, and winding walks, and

Newport, from the Bay.

other features of luxurious rural elegance, where the rich and fashionable gathered and kept high revel.

People were attracted to the town, not only because of the salubrity of the climate and the beauty of the scenery, but also by the fact that liberty of conscience ruled supreme in Newport. Quakers lived unmolested there; Baptists built their first meeting-house there; Calvinists preached their sternest doctrines without offence; Hebrews crowded their commodious synagogue; Moravians opened their love-feasts to all who would pay their fourpence-ha'penny, distributing to each his sweet buns and cup of choc-

View from Fort Adams.

olate; and Churchmen prayed fervently for the king and all the royal family. The synagogue, built in 1762, stands to-day in as good repair as it ever was, although its doors are rarely if ever opened for public worship; and old Trinity Church, erected nearly a century and a half ago, with its crown-surmounted spire, and huge, square pews, with the wardens' poles indicating where the dignitaries sit, and lofty pulpit, with its hexagonal sounding-board, and reading-pew and clerk's seat planted far down the aisle, and ancient organ, presented by Bishop Berkeley, adorned with crown and mitre, and the little chancel, denuded of nothing but the lion and unicorn, which were taken from the wall after the Revolution and burnt by patriotic hands—every thing looking

just as it did when ancient gentlemen in scarlet coats, and laced ruffles, and silver buckles, and curled wigs, and ladies in their rich brocades, crowded the edifice, and reverently knelt while the priest prayed, and the sonorous clerk acted as their proxy in the response. One portion of the structure, we are glad to say, was long ago removed —the two pens in the organ-loft, pierced with little funnel-holes, through which the poor negroes deposited there might see, without being seen.

Fifty years ago Newport was a torpid, quiet place, its trade extinct, the streets deserted; wharves that were once vocal with busy traffic mouldered away and sunk out of sight under the waters; land of no value; population reduced; strangers rarely find-

The Drive.

ing their way to this old, forgotten town by the sea; the houses weather-worn, unpainted, and falling to pieces—who would then have thought of investing his money in the desolate acres that fringed the borders of this forlorn, dilapidated little village?

The Revolution seemed to have ruined Newport beyond redemption; when the British troops evacuated the place, and the French fleet under D'Estaing entered the harbor in 1780, it was a desolation. In the course of a few years the business of the town had somewhat revived, and, at the beginning of the present century, we find the names of several eminent merchants engaged in commerce there, the house of Gibbs & Channing wielding what in those days was regarded as an immense capital; but the

second blow which Newport received by the embargo and the War of 1812 proved fatal, and from that period her commercial doom was sealed.

What Newport is *to-day* all the world knows. One or two of these desolate, rocky acres is now a fortune to their possessor. A combination of attractions exceeded by no other watering-place on the continent has once more drawn the inhabitants of our towns and cities to this spot, not for purposes of traffic, but for health and recreation; men of culture and of wealth, foreign ministers and noblemen, authors and politicians, clergymen and actors, high-bred women of the old school and fashionable women of all schools, gather here every season; some to lead a quiet, rational, domestic life, and some to display their finery; spacious hotels are crowded with visitors, *cottages*—every thing here is called a cottage—of every variety of architecture, Swiss, Gothic, French, Elizabethan, and American, and of every degree of cost, from the humbler structure that is rented for a thousand a year up to the stately mansions in which hundreds of thousands are invested, line the spacious avenues, or nestle among the foliage in the more retired and quiet streets; the grandest steamers in the world land their passengers here every morning, and smaller craft ply all the day up and down the Narragansett shores; every afternoon Bellevue is a whirl of splendid equipages; night and morning, bands of music fill the air with melody, and "all goes merry as a marriage-bell." When the chill winds of autumn drive these summer residents back to their city homes, the old town relapses into its winter sleep—not as profound a slumber as it slept for some two or three generations, for there is always work to be done in preparation for the next campaign—still it is very quiet; windows are boarded up, gates locked, some of the more fashionable shops closed, and horses and carriages are seen no more on the broad avenues.

This is, in brief, the *threefold* aspect which Newport has presented during the last hundred and fifty years. We now turn to the special points of attraction, as indicated by our artist.

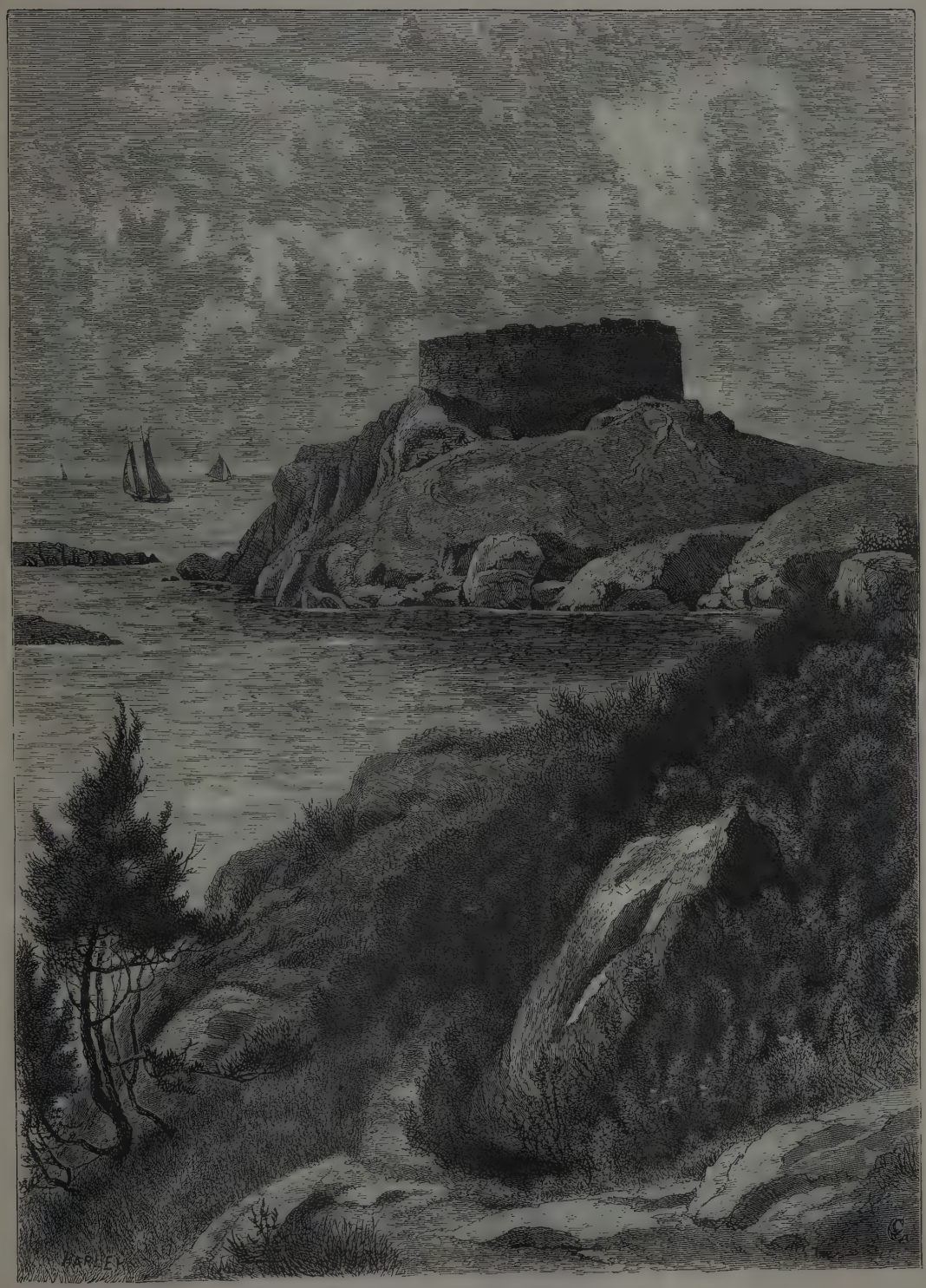
In entering Newport Harbor, Fort Adams, forming an angle on the right-hand corner, presents to the eye a singularly beautiful and picturesque appearance. Fortress Monroe is the only structure of the kind in the United States that exceeds it in size and cost, and a few years ago it would have seemed as if its massive walls must be strong enough to resist any assault that could be made upon them, and its multitude of ponderous cannon have been too formidable to allow the passage of any ship that floated into the waters of the Narragansett Bay. But guns have recently been constructed that would send this granite pile, with its bastions and battlements, flying into the air like broken crockery; so that its use, as a citadel of defence, is at an end. At the same time the necessity of such a protection against the attacks of a hostile fleet has ceased; just under the guns of the fort lies what is known as Torpedo Island, where scientific men are now making and testing a new submarine projectile,

ON THE BEACH.

which no precaution can hinder from finding its way to the keel of any ship that ventures near the shore, and blowing it to fragments. The morning and evening gun may continue to salute the break and the close of the day for many years to come, the Stars and Stripes to float over the fortress, the soldiers to keep watch and ward upon the walls, but it will no more be regarded as a stronghold of defence—only as an interesting relic of the past.

Fort Adams is a favorite place of resort with the summer residents of Newport, especially on the afternoons when the regimental band plays, and the dashing down of carriages and the clatter of hoofs over the steep, stone declivity under the frowning archway which opens into the spacious parade-ground, covering a space of eleven acres, and the roll of vehicles around the broad, circular drive that surrounds the enclosure, make a pleasing change from the somewhat dull and monotonous military routine to which the officers and soldiers are subjected. The amount of money that has been expended here by the government—more than a million and a half of dollars—makes it a very costly place of amusement, and might have been spent more profitably; but amusement is better than carnage, and, if these modern improvements in the science of war should put an end to all strife, none will mourn.

Entering the harbor, on the left your eye rests upon a small, oval fort, gray, time-worn, and dilapidated, standing on the island of Conanicut, and known by the somewhat inexpressive name of "Dumpling." A controversy is now pending in regard to the date of its erection, some persons contending that it was built long before the Revolution, while others believe that it was thrown up by the British at the period when their troops occupied Rhode Island. The first historical notice of its existence is found in a letter addressed by General Pigot, commander of the English forces, to Sir Henry Clinton, in which he says that "the guns of Beaver Tail and Dumpling are unserviceable, as the French fleet entering the harbor would cut off communication with Conanicut." The date of this letter is 1778. The fort has been left for many years to the corroding wear and tear of the elements, but, while the interior works have been gradually destroyed, the outer walls remain as complete and firm as they ever were. As a means of defence it would be of little service in these days, however thoroughly it might be manned, for one of our modern shells dropped into the centre would blow the whole affair to fragments. Compared with Fort Adams, one of the largest and most completely equipped defences on our shores, which, with its massive walls and long rows of guns, frowns upon Dumpling from the opposite side of the bay, this little tower looks somewhat insignificant; but, as a picturesque *ruin*, it has its charms, and has become a favorite place of resort for pleasure-parties, who cook their fish and bake their clams on the spot that once resounded to the thunder of artillery. For a century the winds have beat upon the old fort; the Cross of St. George has waved over it; the French fleet swept round it as the vessels moved up to their winter-anchorage in the harbor; the



OLD FORT DUMPLING.

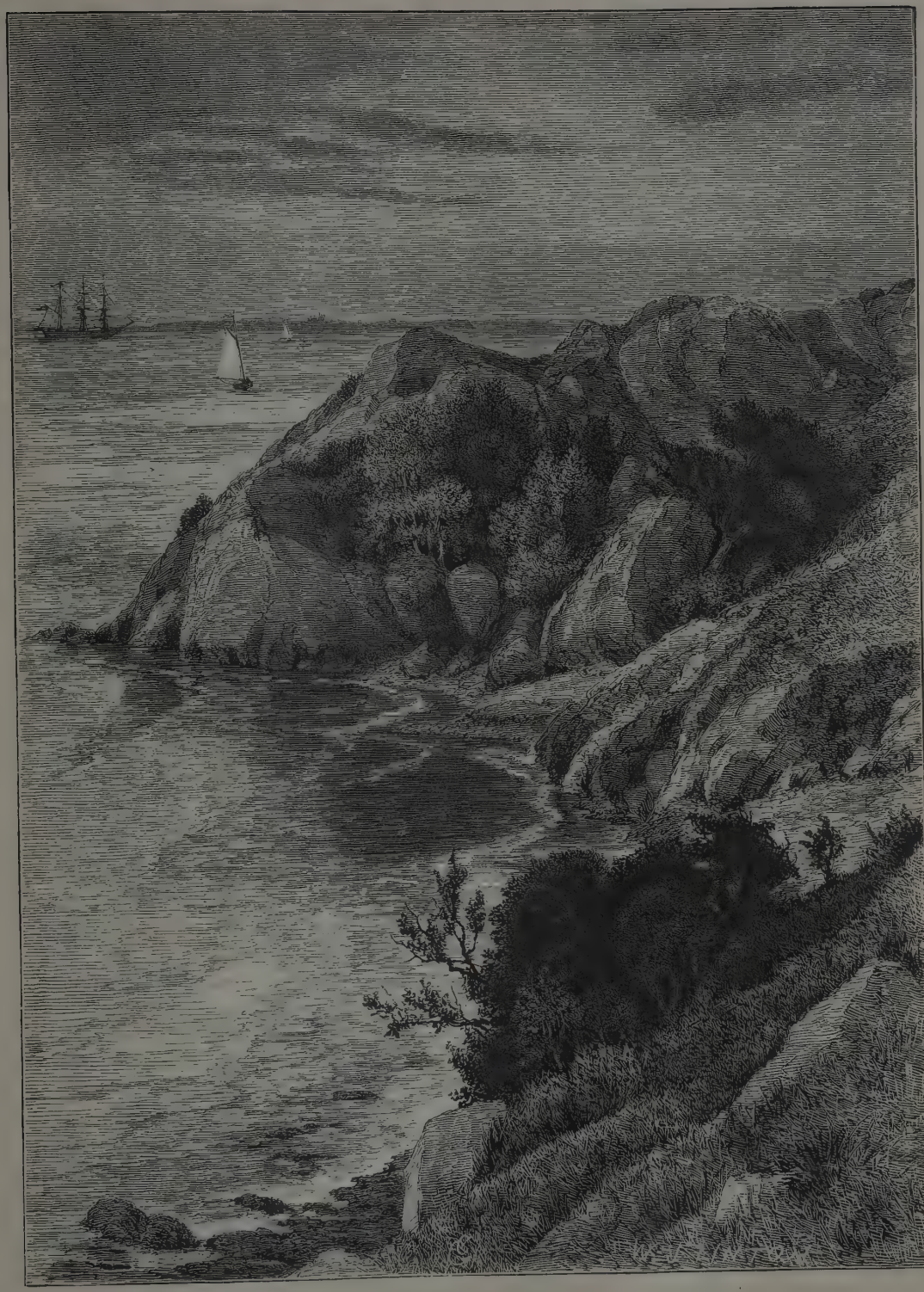
Stripes and the Stars long ago supplanted the British ensign; it is more venerable than the Republic; and we trust that it will be left undisturbed for ages, as it is one of the few memorials in existence of our early history, and may do something to take away the reproach brought against us by our brethren over the sea that we have *no ruins* in the United States.

Brenton's Cove is approached by a causeway leading to Fort Adams, and affords one of the finest views that can be obtained of Newport: "The tall and delicate spires of the churches cut sharp against the blue sky; the public buildings stand out in noble relief; and the line of houses, as they rise one above another on the hill-side, is broken by open grounds and clusters of shade-trees. Each spot on which the eye may chance to rest recalls some event that happened there in earlier times." Looking out from this cove, you might once have seen poor Burgoyne sailing for England after his sad defeat; Cook's famous ship Endeavor was condemned, dismantled, and left to decay upon these shores; the Macedonian, prize of the frigate United States, was brought to anchor here; the British fleet, under Lord Howe, and the French fleet, under D'Estaing, both sailed by this rocky cove, one bringing misery and the other joy to the hearts of the old inhabitants of Rhode Island.

Taking the road leading west, we pass what remains of the house built by Governor William Brenton, through grounds that were in his day "adorned with rare and costly plants, gravel-walks, groves and bowers, and all that wealth and a refined taste could furnish," until we come upon the southern shore, where Brenton's Reef stretches for a mile or more into the sea.

In the picture all is placid and serene; but, when the breakers dash upon that fatal reef, and the strong waves whiten its jagged ridge, it is a place of terror. Many a vessel has been wrecked there; and the mouldering gravestones along the edge of the ocean show where the bodies of the drowned sailors were once buried. Why they should have been deposited there, where the winds and the waves sound a perpetual dirge, and the spray of the ocean always dampens the sods which cover them, instead of being taken to some rural ground, where the birds sing and flowers bloom, we do not know. No doubt they were buried by the hands of strangers, and perhaps, after all, this was the most fitting place for their bodies to rest; and many a solemn thought has been suggested by these humble memorial-stones to the gay crowds who drive by, as the summer sun is sinking in the horizon.

Following the southern shore, we next come to what is known as the Spouting-Rock. After a southeasterly storm, the apparatus is in working-order; and, during the "season," multitudes assemble there to see the intermittent fountain play. The construction of the opening beneath is such that, when it is nearly filled and a heavy wave comes rolling in, the pent-up waters can find relief only by discharging themselves through a sort of funnel into the air. It is, however, a somewhat treacherous operator:



BRENTON'S COVE.

for a long time there may be no spouting done; and, even when the waves roll in from the right quarter, it is not easy to tell just when the horn intends to blow. If the interesting couple depicted in our sketch remain standing much longer where they are, before they know it the fountain may spout up some forty or fifty feet, and they will go home with drenched clothes and a wet skin. But the ocean-view is, at this spot, so indescribably grand after a storm, that the temptation to linger as near the edge of the rocks as possible is almost irresistible, and we have seen many a gay company pay the watery penalty.

Beyond the bathing-beach, where hundreds of fashionable people may be seen dashing about in the waves on every pleasant day, rise the precipitous rocks, with the deep and sharp-lined fissure, known as "The Purgatory." How it ever came to be called by this singular name, tradition does not inform us. A little beyond this chasm, there is a pleasant spot, shaded by trees, and commanding a beautiful view, which is known as "Paradise"—so that, when a stranger in that region asks the way, he is likely to be told that he must pass by Purgatory to Paradise.

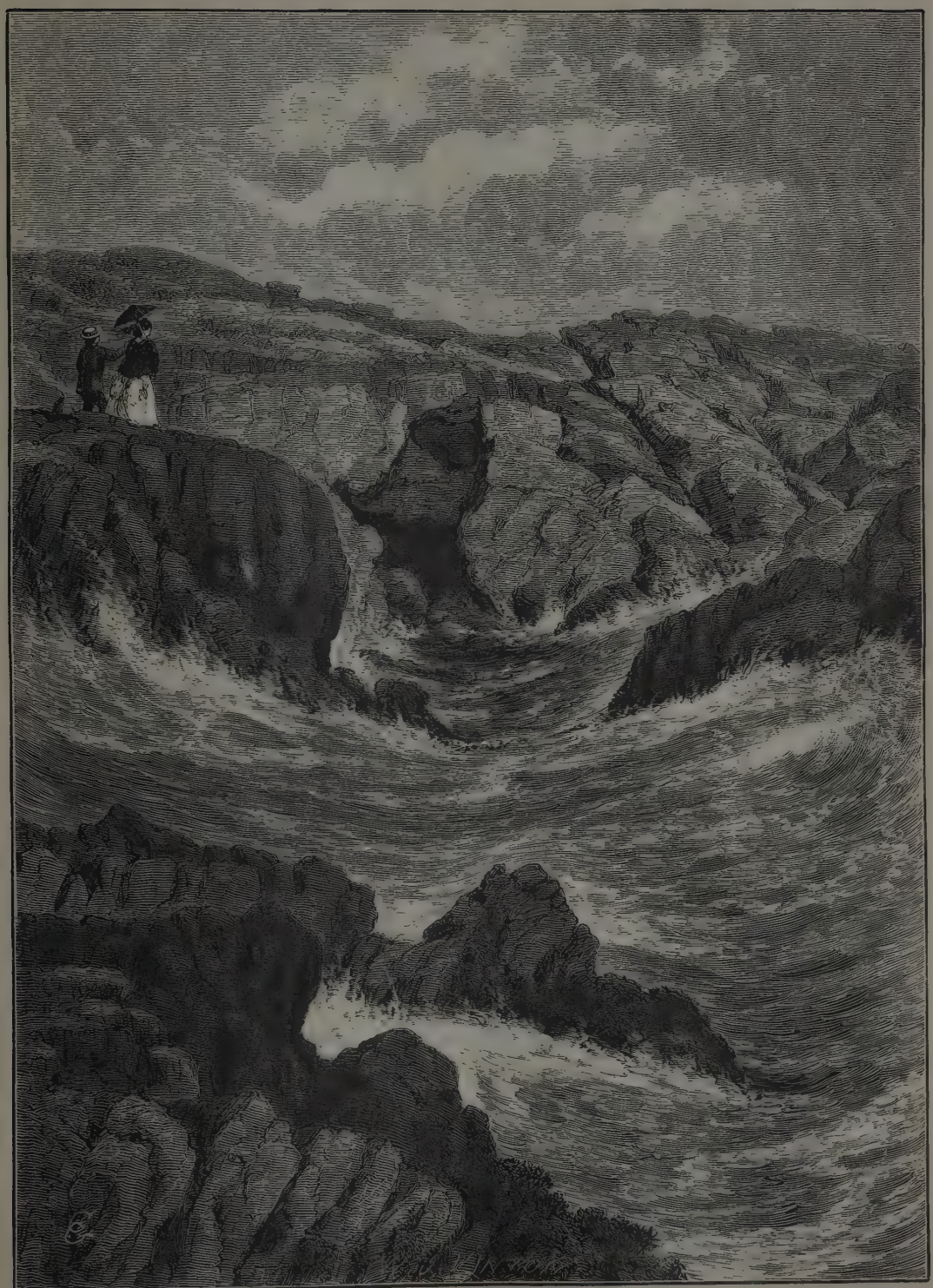
The opening in the cliff extends one hundred and sixty feet, and is fifty feet deep at the outer edge. It is from eight to fourteen feet wide at the top, and from two to twenty at the bottom. It was once supposed that the water at the base was unfathomable; but at low tide it is actually not more than ten feet in depth.

It was formerly the prevailing theory that this fissure was occasioned by a sudden upheaving of the rock; but, after careful examination, Professor Silliman came to the opinion that it was probably formed by the gradual eating away of the softer portions of the stone at a very early period.

Like most places of the kind, Purgatory has its legends.

Some little time after the settlement of the country by the whites, an Indian woman murdered one of the colonists, in revenge for certain wrongs inflicted upon her people. Walking, one day, near Purgatory, she was accosted by a person, appearing to be a well-dressed Englishman, who proposed to fight with her. The stout squaw was not unwilling to accept the challenge, and in the struggle she was gradually dragged toward the edge of the chasm, when her opponent seized her in his arms, and leaped into the abyss. At this moment the cloven foot appeared, his goodly garments fell off, and he was revealed in his true Satanic personality. Why the devil should have felt himself called upon to interfere in this way to punish the woman for the wrong that she had done to the English settlers, does not appear; but, as the print of his feet and marks of blood are still visible on the stones, it is not for us to gainsay the story. At any rate, it is easy to see that such a belief on the part of the Indians might have tended to promote general security.

Another legend pertaining to this spot is not quite so tragical, and perhaps can be better authenticated. A beautiful but giddy girl, heiress to a large estate, had for

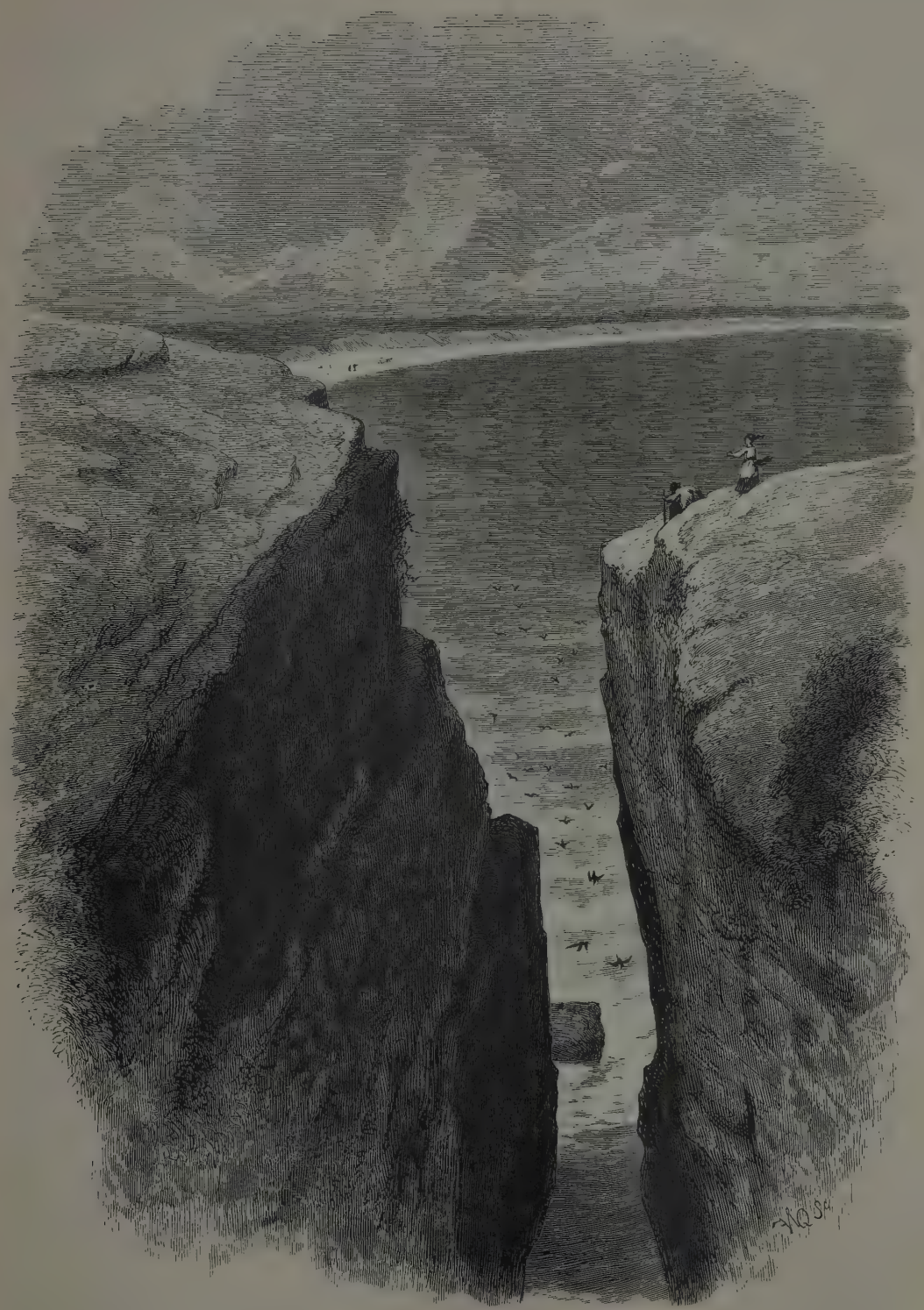


THE SPOUTING CAVE.

some time received special attentions from a young man, in all respects her equal, and whose affection, notwithstanding appearances to the contrary, she warmly reciprocated in her heart. But the passion for coquetry was so strong with her, that she could never resist the temptation to torment her admirer; and, one day, as they stood together on the brink of Purgatory, and he was pleading, with impassioned eloquence, for some pledge or token of love from her, she said, "I will be your wife if you will show the earnestness of your devotion to me, and your readiness to obey all my wishes, by leaping across this abyss." Without a moment's hesitation, the young man sprang to the other side of the rock, and then, politely lifting his hat, he complimented the beautiful girl upon her charms, told her candidly what he thought of her character, bade her final adieu, and she saw his face no more. After this, as the tale runs, she went mourning all her days.

It is not to be presumed that this is the scene which our artist intended to portray in his sketch; for, although the young damsel seen there is coquettish enough in her appearance for almost any thing unreasonable, the aspect of her companion is certainly not very suggestive of foolhardy courage—to say nothing of the absolute impossibility of his being able to leap the opening at the point which this interesting couple occupy.

"Berkeley's Seat" is in Paradise, within easy walking-distance of the house which he built and occupied nearly a century and a half ago. Out of regard to the memory of Charles I., to whom he was indebted for certain favors, he called his place Whitehall, one of the palaces occupied by the king. It is still standing, and in good repair. There is the room which he occupied as a study, with its tiled fire-jambs, and low ceiling, and undulating floor, and the little chamber where he slept; and it is pleasant to think that, in the sunny court-yard adjoining, he once walked—perhaps discussing with his friends the state policy of Walpole, or the probable future of the new Western land, "whither the course of empire" had already begun "to take its way," or the medical virtues of tar-water, or it may be some of the profounder problems of the soul which occupied his thoughts. When the weather was favorable, he betook himself to the sheltered opening in Paradise Rocks, which is now consecrated by his name. This he is said to have fitted up with chairs and a table; and tradition says that it was in this rocky cave he wrote his "Minute Philosopher." With the broad expanse of ocean before him, and its monotonous roll sounding in his ear, it may be that he was able to give his thoughts a wider range, and fix them more intently upon the subtile questions which he was so fond of contemplating, than was possible in the pent-up little room where he kept his books; and it may have been easier for him to bring his mind to the conclusion that there is nothing in the universe but *soul* and *force*—no organic substance, no gross matter, nothing but phenomena and relations and impressions—than it would be if he were shut in by doors and walls, and nearer to his kitchen.

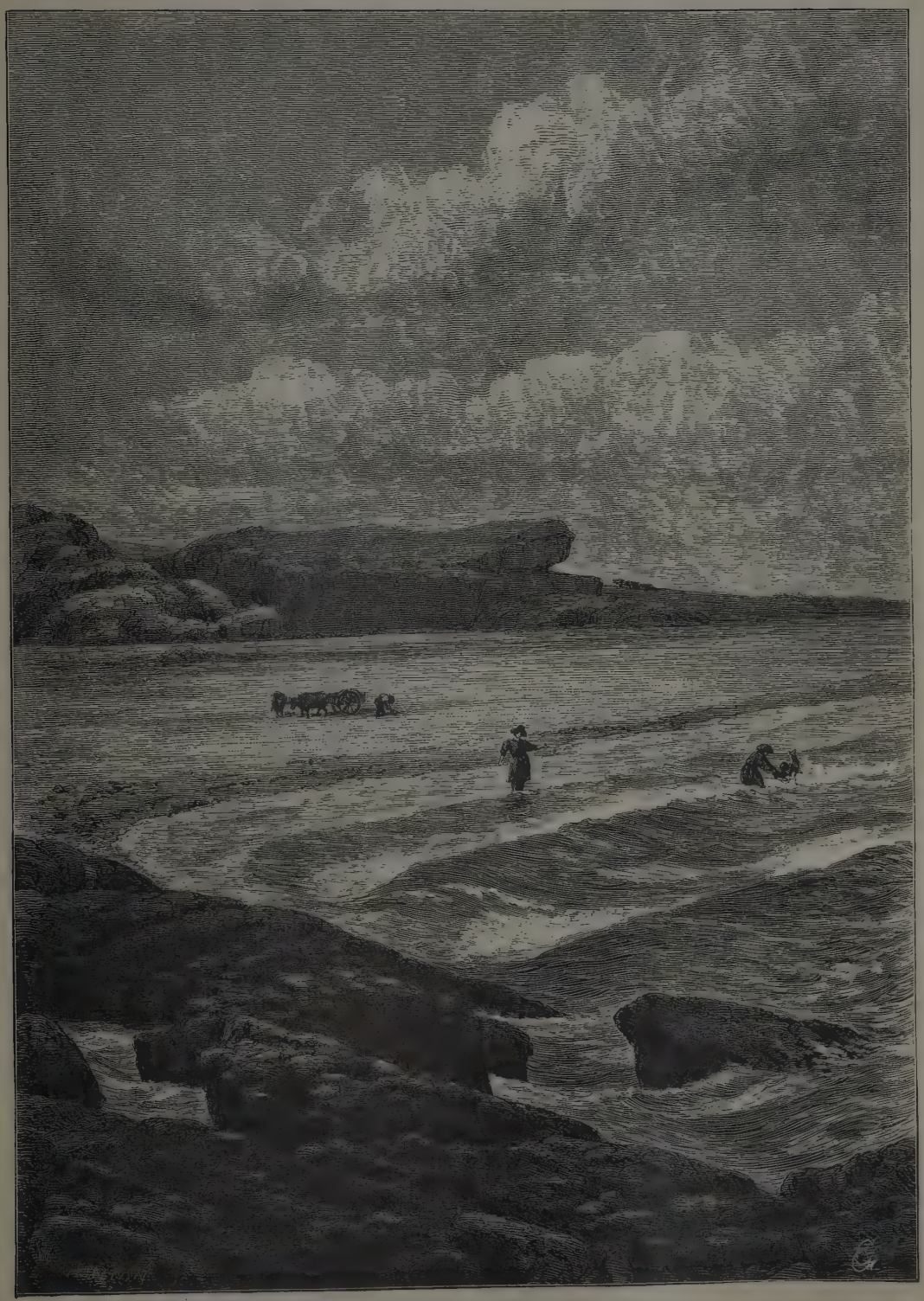


PURGATORY.

This portion of the island does not lie within the boundaries of the city of Newport, having been set off, many years ago, in order to avoid the taxes, and is now known as Middletown. It was, however, the Newport of Berkeley, chosen by him as a residence because of its superior fertility as well as natural beauty, for the good dean was something of a farmer as well as metaphysician. This southeastern shore has here-

Distant View of Purgatory.

tofore been little resorted to by strangers, and few persons have as yet made it their summer residence; but the recent opening of new roads leading directly to the town, and the construction of broad avenues which intersect the whole region, and which will soon be lined with shade-trees, must, before long, transform the scene, and make this a favorite resort for visitors. Here are three miles of drive over a rich and luxuriant sward, that does not require an inch of grading, bending down toward a shore diversi-



"BERKELEY'S SEAT."

fied by picturesque rocks and groves and sandy beaches, where you look out toward the southeast on the broad ocean, and northward upon the interior country—a combination of attractions found perhaps nowhere else upon our coast, and which, in process of time, will lead multitudes, who desire retirement and quiet, with all the pure delights that come of a salubrious atmosphere and beautiful scenery, to build their houses and plant their gardens here.

In the following strains Mr. Longfellow tells how "the Viking old" found his way from "the wild Baltic's strand" to our strange shores, and built here "the lofty tower" by the sea, commonly known as "the old stone-mill:"

"Three weeks we westward bore,
And, when the storm was o'er,
Cloud-like we saw the shore
Stretching to leeward;
There for my lady's bower
Built I the lofty tower,
Which, to this very hour,
Stands looking seaward."

We wish that we could believe in our having so respectable a piece of antiquity in Rhode Island. Inasmuch as this interesting and unique structure dates back to the prehistoric times of the colony, no record of its construction being in existence, and, still further, as it has a close resemblance to certain edifices still existing in Northern Europe, many have been willing to accept the tradition that it must be of Danish origin. One theory is, that this old ruin was originally an appendage to a temple, and used for religious offices, as a baptistery. Others suppose that it was erected as a tower of defence, and that, after the walls had crumbled until they were reduced to their present height, a wooden mill was erected on the summit.

The first authentic notice of the edifice is found in the will of a Mr. Benedict Arnold, dated 1677, in which he bequeaths his "stone-built windmill" to his heirs. About the middle of the last century it was surmounted by a circular roof; and one of the old inhabitants, in a deposition signed in 1734, says, "It is even remembered that, when the change of wind required that the wings, with the top, should be turned round, it took a yoke of oxen to do it." There is abundant tradition to show that it has been used for various purposes; and a hundred and fifty years ago it was known as the Powder-Mill—the boys, as late as 1764, sometimes finding powder in the crevices; and, at a later period, it was used as a hay-mow. It is somewhat singular that such a substantial and peculiar structure should have been erected simply as a windmill, but this may be explained by the facts that the first wooden mill was blown down in a great storm that occurred in 1675; that Governor Arnold was unpopular with the Indians, and would be likely to build a mill that would withstand both storm and fire, and *look* like a fort at

least; and, still further, he may have seen old mills in England of the same style—there being an engraving in the *Penny Magazine*, of 1836, of one near Leamington, which is the very counterpart of the Newport mill. The various traditions connected with this old relic impart to it a special interest; and, unless it is upheaved by the earthquake or demolished by lightning, it is likely to stand for many generations.

Commodore Perry's Statue and the "Old Mill."

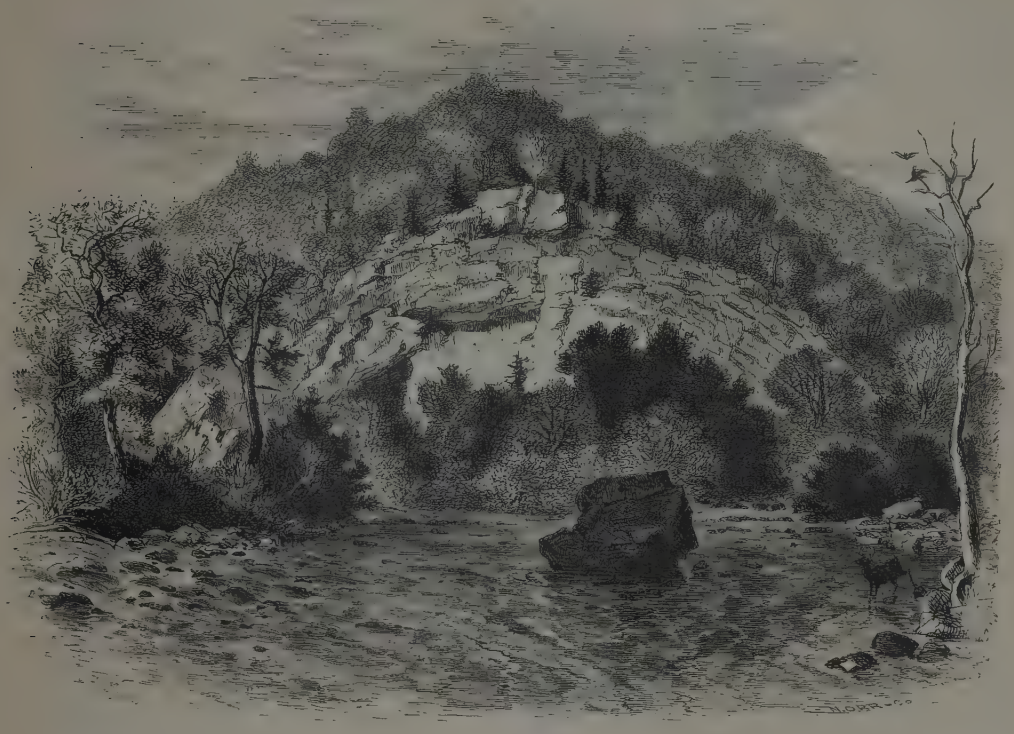
At a little distance from the old Stone Mill, on the easterly side of the public square, stands the statue of Commodore Matthew Calbraith Perry, erected by his son-in-law, Mr. Belmont. The material is bronze; and the accurate proportions, the graceful attitude, the well-disposed drapery, and the speaking likeness, combine to give this statue a high place among our works of art. It would be well if Mr. Belmont's example should be followed by other wealthy citizens of our republic.

We have now glanced at Newport as it was a hundred years ago, as it was fifty years ago, and as it is to-day. What will be its appearance fifty years hence? The streets of the older part of the town may continue to be as narrow as ever; and, unless a wide-spread conflagration should sweep them away, the ancient wooden houses may crowd upon the gutters, as they have always done; the venerable stone-mill will stand in its place, a monument of the prehistoric ages of Newport; Trinity Church, we trust, will be undisturbed, whether the congregation abide by its courts or not; the Jewish Synagogue is secured from ruin by a perpetual endowment; the port-holes of Fort Adams may still show their iron teeth, unless, indeed, the advance of military science should have made all such stone fortresses unserviceable, or the universal dominion of the doctrines of peace—which God, in his mercy, grant!—have swept them all away.

The natural features of the region will remain unchanged; the same rocks will frown upon the sea; the same purple haze rest at eventide upon the land-locked harbor; the same veil of ocean-mist temper the brightness of the noontide sun, and tide rise and fall on the sandy beach with the same rhythmical flow; the storm thunder with the same loud turbulence; but, meanwhile, what changes will the hand of man have wrought? Within the last twenty years miles upon miles of barren pasture have been converted into lawns and gardens and verdant groves; millions have been expended in the erection of beautiful villas and stately palaces; the tide of population has set in like a flood; and such are the peculiar advantages which Nature has bestowed upon this lovely spot, that no caprice of fashion can ever turn back or arrest the flow of its prosperity. Regions now unoccupied will soon be covered with habitations; the summer population will spread itself all over the southern portion of the island, from east to west, and then crowd back into the interior, until the whole area from south to north is made a garden of beauty. Newport will never again become a busy mart of traffic; its ancient commerce will never return there; the manufactures which have made "the Providence Plantations" so rich will never flourish in "the Isle of Peace," for the soft and somewhat enervating climate is not conducive to enterprise and activity; but those who need relief from the high-strung excitement of American life, the merchant who wants rest from his cares, statesmen and writers who would give their brains repose, will find it here. The men of our land, above all others, require some such place of resort, to allay the feverish activity of their lives—a place where they may come together periodically, not for debate, and controversy, and labor, and traffic, but for pleasant talk, and rational recreation, and chastened conviviality. They need to dwell where, for a part of the year, they can see the sun rise and set, and scent the flowers, and look out upon the waters. This green island seems to have been made by a kind Providence for such uses as these, where men may forget their cares and cease from their toils, and behold the wondrous works of God, and give him thanks.

IN WEST VIRGINIA.

ILLUSTRATIONS DRAWN BY W. L. SHEPPARD, FROM SKETCHES BY DAVID H. STROTHER.



Arched Strata.

IN looking at the map of West Virginia, we may observe that its central regions are so hatched and corrugated with the shadows of mountains, so scribbled over with twisted and meandering lines representing the water-courses, that it is difficult to trace, amid these topographical entanglements, the lighter lines and dots which should indicate the highways and centres of population, or to collect together into words even the bold capitals which tell us the names of the counties. Now, fortunately for the map-makers, the mountains and rivers have the field pretty much to themselves, and there is little else, in reality, to perplex the student's eye.

Yet the adventurous traveller who undertakes to explore this shadowy realm in person will be amazed to find how far the geographical picture has fallen short of the savage and tremendous reality. In its untrodden wilds he will find himself bewildered with difficulties he never dreamed of, and sometimes confronted with dangers he had not provided against. Far beyond the range of pleasure-seeking tourists, he will be often sur-

prised with scenes whose beauty would charm an artist into ecstasies, whose sublimity might awe a poet into silence. Unversed in the explorations of interested science, he may bark his shins over fossil specimens which would throw Wall Street into a fever, and stoop to slake his thirst at mineral fountains whose healing virtues might alarm the solemn quackery of our medical professors. In districts as yet inaccessible to industry and commerce he will see the earth encumbered with the crude materials which constitute the solid wealth and power of nations. Let every sturdy doubter go and see for himself! Yet there are many who would shrink from a personal encounter with the wilderness, and others, perhaps, whose jealous occupations deny the needful leisure for the exploration. Let these betake themselves to easy-chairs and slippers, snuffing the mountain-air in fancy through a hot-house nosegay, or the more virile fumes of a meerschaum pipe, and thus follow our leading through one of the most civilized, easily accessible, and curiously picturesque, of these mountain-districts.

For the sake of convenience and a pleasant starting-point, we will rendezvous at the Berkeley Springs, a famous summer resort near Sir John's Station, on the Baltimore and Ohio Railroad. Thence, by a good graded road, on wheels or horseback, as may be preferred, we can in two days' easy travel reach Moorfield, seventy-five miles distant.

In skipping thus lightly over our preliminary journey, it must not be supposed that we have seen nothing worthy of remark by the way. On the contrary, the entire route abounds in objects of interest and beauty. We have seen the imposing cliffs of Candy's Castle, at the crossing of the north fork of Cacapon River. A few miles distant, on the same stream, is the famous natural ice-house called the Ice Mountain. Then, at Romney, we have the Hanging Rock and the view from the yellow banks; and, farther on, we pass through Mill-Spring Gap, and wonder at the long, regularly-scalloped ridge of the Trough Mountain, resembling a row of potato-hills; then under the impending cliffs at the Northern Gate, and finally the first glimpse of the great South-Branch Valley, stretching around Moorfield. All these, and twenty others that we have passed in our journey, are pictures to adorn an artist's portfolio, and to impress a tourist's memory. Yet, as we feel that neither pen nor pencil, nor both combined, can cope with Nature all in full light, in arranging our scenic drama, we are constrained to leave many subordinate beauties in shadow or demi-tint, that our feeble art may be enabled to exhibit the selected points more effectively. Yet we cannot conscientiously turn away from the scene immediately around us without something more than a passing word; for, while we may meet with many objects whose rugged and startling features bring them more readily within the power of the graphic arts, we shall see nothing in our travels more softly and magnetically beautiful, to soul and eye, than this same valley of Moorfield.

The South Branch of the Potomac has its sources in the county of Highland, and, after a comparative course of about one hundred miles, running from southwest to north-

east, and parallel with the great mountain-ranges, it joins the North Branch in Hampshire County, some fifty miles below Moorfield. Its upper waters flow in three principal streams, called respectively the South, Middle, and North Forks, the channels of which, like that of the main river, are bordered by extensive alluvial levels of extraordinary fertility, alternating with narrow, sharp-cut gorges domineered by bare, perpendicular cliffs of sublime height and picturesque forms.

After the junction of its chief tributaries, and about midway of its course, the river leaves the shadow of the mountains, and winds majestically with its double-fringed borders through an unbroken stretch of bottom-lands, eleven miles in length by three in breadth, lying, like a magnificent billiard-table, cushioned with mountain-ranges of graceful outlines and exquisite coloring, and rising to the imposing height of fifteen and eighteen hundred feet. This rich and verdant plain is mapped into fields and farms of manorial propor-

Hills near Moorfield.

tions, and dotted over with double-brick, tin-roofed houses and herds of stately cattle, betokening a land of easy wealth and old-fashioned abundance. Like the queen of this fat realm, the pretty village of Moorfield sits sleepily on the river-bank, half embowered in shade, awaiting the homage of her subjects, who gather in on court-days to settle lawsuits and talk of oxen, and who rejoice in a comfortable three-story brick hotel, with a landlord who understands good living. But we must tarry no longer in this enchanting Capua, lest amid its hospitable seductions we may forget the motives of our journey, and disappoint our artist, who is anxious to have a tilt with his crayon against the giants of the North Fork.

Continuing our route southward by a pleasant, graded road, in an hour's ride we arrive at Baker's, seven miles above Moorfield. Just before reaching the house, we catch a glimpse of a pretty cove on our left, overlooked by a secondary range of rounded hills faced with some curious rock-work. The view is interrupted by trees, and sufficiently imperfect to stimulate the imagination. So we open the bars, and, riding across cultivated fields for half a mile, find ourselves in the meadow immediately opposite the objects of our curiosity. The closer and more satisfactory view brings no disappointment, but, on the contrary, increases our astonishment. Here are five conically-rounded hills, rising to a height of several hundred feet above the plain, singularly regular in shape and size, each adorned with a half-detached façade of rock-work of the most peculiar and fantastic character. One is at first reminded of the Moresque castles and walled towns of Barbary; then follow suggestions of Oriental conceits from the ancient temples of Benares; but, as we continue to gaze, these vague fancies fade, and we become possessed with the grotesque and freakish originality of the scene, which finds no counterpart in any work of human art. Geologically, these rocks are of stratified sandstone, upheaved perpendicularly; cracked, splintered, and abraded, by the elements; their exposed edges wrought into the most strange and startling shapes—

> "Like some Bedlam statuary's dream,
> The crazed creation of misguided whim"—

images which might be worshipped without breaking the second commandment. So far overtopped by their loftier neighbors, these hills scarcely suggest emotions of sublimity; yet they hold us by the fascination of a curiosity not unmingled with awe, and, had we but a spice of Oriental faith and fancy, we could swear we had looked upon the ruins of some mighty race of genii who held this land before the flood.

We will now push on toward Petersburg, ever and anon casting a lingering look behind, over the level perspective of the beautiful valley, and the fading blue of its northern boundaries.

After a short ride of two miles, we suddenly turn into the cool and shadowy gorge

PETERSBURG GAP.

of the Southern Gate, through which the river pours its clear-green waters into the valley. Crossing by an easy ford, we follow the road, which barely finds room to pass between the stream and the overhanging cliffs. Presently the gorge widens, and we call a halt to view that gigantic wall of naked rock, divided from the clouds by a ragged fringe of evergreens, doubled in height by its mirrored counterfeit in the placid river. Here every thing is on a sublime scale; yet the scene is sweet and tranquil as the interior of a Christian temple. The neighborhood wonder is found in the likeness of a red fox at full speed, painted high on the cliff by the hand of ages. The uninitiated find some difficulty in making it out; but, once seen, the resemblance is strikingly good, tail and all. The gorge is about a mile in extent, affording grand and pleasant views from many different aspects, but no convenient stand-point for the artist. From its upper end we may see Petersburg, about two miles distant. Here our perplexed Salvator dismounted, and, scaling a rude cliff, nestled amid the gnarled branches of a dead cedar, hanging a hundred feet above the road. As he showed no disposition to descend, and returned no answer to our summons, we presumed he had attained the object of his search, and rode on to Petersburg alone. About nightfall, our companion joined us at the village-tavern, elated with his sketch, which tells its own story.

From Petersburg to Seneca—a distance of twenty-two miles—there are two roads. The turnpike, easily practicable for wheeled vehicles, clings to the mountain-sides, avoids the crossings, and misses many of the most interesting views. The river-road, practicable only for cavaliers, is rugged, miry, and crosses the stream by frequent plunges, yet, to the tourist looking for the picturesque, is far the most interesting; so we will not hesitate to choose it. About four miles above Petersburg, we see the junction of the North and Middle Forks of the South Branch. Near this point we halt to examine a singularly perfect and beautiful exhibition of arched strata, laid bare by the action of the waters. The arch is the segment of a circle several hundred feet in diameter, apparently as regular as if drawn by an engineer. The breakings of the rock are as clean and square cut as if they had been wrought by a master-mason, its colors and sylvan adornments rich enough to please the most exacting artist. The river sweeps its base in a succession of sparkling rapids; and in the middle of the stream, immediately opposite the centre of the arch, lies a huge, black bowlder, looking as if especially introduced to complete the artificial regularity of the scene. Ignoring the incidental beauties of sparkling stream and graceful foliage, we think the subject would more appropriately adorn a geological museum than a landscape-gallery, and its aspect in Nature excites no other emotion than that of pleasing curiosity.

Within the next mile or two, we cross the fork again, and come suddenly upon a scene of quite another character. At the butt of a sharp spur rises a towering architectural mass, which any one familiar with the Old World would pronounce a well-preserved feudal ruin, and a purely American imagination would conceive to be the

chimneys of a burnt factory. As the probabilities of finding a feudal castle and a modern factory in this region are about equal, we must deviate a little from the highway to obtain a better view of the startling object. Even upon a closer inspection, it is diffi-

Chimney Rocks.

cult to divest one's self of the idea that human hands must have played some part in the erection of the pile before us. So regular and square cut is the masonry, so shapely the towers, so artistically true the embattled summits, the supporting buttresses, the jut-

Karr's Pinnacles.

ting turrets, the cold, gray walls, dappled with lichens, moss, and weather-stains—all combined so artfully to mimic the "ruined castle of romance," that the garish light of a summer morning is scarcely strong enough to dispel the illusion. Yet, by turning on a still stronger light—that of a materialistic age and traditionless country — our castle dwindles into a geological vagary, and we resume our journey, filled with vague regrets.

Since leaving the gorge of the Southern Gate, we have seen rising before us, like a mass of dark, rolling thunder-clouds, the cliffs and pinnacled spurs and grinning summits of the great Alleghany Ridge. Between these and a parallel mountain of gigantic height and savage aspect flows the North Fork, whose borders we are now bent on exploring. Following the river-road, we pass by many a wild and disrupted battle-field, where for unnumbered ages the elements have striven for mastery—

> "Crags, knolls, and mounds, in ruin hurled—
> The fragments of an earlier world."

On these fields the geologist may find a whole library of useful knowledge open for his perusal. Here, too, the statesman may read, in the continual abrasion of lordly peaks and elevation of humble valleys, the gradual but certain tendency of all created things toward the millennium of level equality. Here, also, is written stupendous confirmation of the simplest and grandest lesson of life's philosophy. Though the inconceivable power of primeval earthquakes has heaped up these mountain-barriers, ridge upon ridge, that trickling streamlet, born of a dew-drop, has reft them to their base. The hurricane flaps his frantic wing and the thunder roars in vain against the pride of those towering cliffs, which the sneaking, fairy-fingered frost will one day send crashing headlong down into the abyss below:

> "Not to the haughty, nor the strong,
> Do the powers of earth belong,
> But to the patient and the meek
> Who the paths of wisdom seek."

The artist, whose gifts are spread over the surface of life, does not perplex himself with these things, but is rather annoyed with the superabundance of pictorial attractions, and the difficulty of selecting. Especially pleased is he when we chance upon a subject so peculiar and impressive in its features that it leaves him no discretion. Such a point we find at Karr's, eighteen miles above Petersburg; and, as the day is usually far spent when we reach it, we will lie by for the night at the farm-house. Old Adam Karr has gone to his rest some years ago, but he has doubtless left behind some scion of his sturdy race to inherit the old homestead, and with it, we may hope, the quaint humor and genial hospitality of its ancient proprietor.

To approach the Pinnacles, about a mile distant from the house, one must ford the fork and ride up a narrow ravine, densely wooded. Jutting from the point of the opposite hill, we see two thin sheets of rock, towering perpendicularly, side by side, far above the tops of the loftiest forest-trees, their jagged and grotesque outlines drawn in dark *silhouette* against the clear-blue sky. The edge presentation exhibits a pair of monuments, one of which bears a rude resemblance to the obelisk of Luxor, the other to

THE CLIFFS OF SENECA.

a monumental spire of the pinnacled Gothic style. Measuring them by the Yankee rule of guess, I should say they exceeded two hundred feet in height, with a tapering width of from ten to five feet. Here are no suggestions of Oriental fancy nor feudal romance, no graceful details nor bright surroundings, to relieve the solemn, tomb-like aspect of the scene. Staring like grim Cyclopean skeletons through the lonely wood, they have "a fiendish look," and we feel a creeping terror in their presence. An imaginative man, about twilight, would instinctively avoid the spot—never willingly visit it alone. We were glad when the sketch was finished, and we were free to return again to the friendly sunshine and the every-day beauties of Nature. Our picture, though technically correct, has quite failed to catch the haunted aspect of the locality.

From Karr's, an easy ride of five miles brings us to the mouth of the Seneca, where we find a little trading settlement. But this fact does not interest us at present. On reaching the open ground, all our faculties are at once concentrated on the magnificent object just across the river—a scene in which all the elements of curiosity, beauty, and sublimity, seem to have been accumulated and combined. Imagine a thin, laminated sheet of rock, half a mile long by five hundred feet broad, set up on edge, the base covered for one-third of the height by a forest-grown talus; its sides ribbed with narrow terraces, moss-carpeted and festooned with gay, flowering shrubs; the bare surfaces stained with varied colors, white, yellow, red, brown, gray, and purple; its upper edge riven, splintered, and carved with a succession of grotesque forms which the pencil alone can describe. On the left the cliff abuts against a wooded mountain, defended, as it were, by a double line of bastioned and embattled walls. On the right it terminates abruptly in a sharp precipice. From the opposing hill juts another towering pile of rock, which forms the narrow gate-way through which appears a long vista of woods and mountains. Now we have the picture sketched in outline; but how shall we describe the varied emotions excited by its diverse forms and ever-changing countenance? When the sun gilds its painted and festooned sides, we glory in its beauty; when a passing cloud veils it in shadows, we are awe-struck by its weird sublimity. Having partially satisfied our emotional appetites, we take a recess, and ride up to Adamson's to dinner. In the afternoon we return, and cross the river on foot by a fording-place so rugged and slippery that we cannot trust our horses to carry us. Up the steep bank, and across a shaded plateau, we enter the gate-way, which is farther from the river than we anticipated. Here we find the inevitable water-power—a trickling rill, whose current might be stopped by a thirsty ox—the insignificant author of this tremendous ruin. Turning from the horse-path, we clamber up the talus at the base of the right-hand abutment, and, when out of breath, sit down to recover, and look up. We are now directly fronting the perpendicular edge or gable-end of the great cliff. The first emotion is one of bewilderment, not unmingled with dread, at the impending proximity of the awful pile, as if we were standing under the leaning tower of Garisenda, at Bologna. As we next begin to

Cathedral Rock.

note the details, and comprehend the general effect of the mass, we are troubled with a strange sense of incredulity, a distrust of our senses, even a certain flushing of resentment, as if some imposition were practised upon us. All that we have heretofore seen and wondered at has not quite prepared us to accept this literally. Can this be reality, or is it only a stony nightmare superinduced by a surfeit of rocks? Yet, there it stands, in motionless and silent majesty, a vast minster of the Gothic ages, growing more and more marvellous as we scrutinize its carven details, and estimate its sublime

Cathedral Rock—Side-view.

proportions. There is the grand portal, with its pointed arch, from whose shadowy recesses we may presently expect to hear the organ pealing, and the anthem of chanting priests. There is the heaven-piercing spire, with its pinnacles, finials, turrets, traceries, and all the requisite architectural enrichments, from which anon will ring out the sweet and solemn chimes, calling the world to prayer. There too, sharply traced by sunlight and shadow, are the Gothic oriels and double-arched windows, suggestive of stained-glass pictures, only visible from the interior.

Below, the foundations are laid in square-cut blocks, and the sides ribbed with inclining buttresses, to give assurance of eternal stability; and, stranger than all, the short, unfinished tower has not been omitted—the begging tower, for whose completion questing monks will be collecting money for the next thousand years, perhaps.

By this time doubts have vanished, for Salvator has exhibited his sketch, and I have more faith in a picture than in my own senses. There is no witness who swears so convincingly as the photograph or a sketch from Nature. The casual observer may be easily tricked by his careless eye or exuberant fancy. In the flow of language there is an irresistible tendency to exaggeration, and to subordinate fact to phraseology.

But the patient scrutiny of the pencil-point rarely errs, and the true artistic instinct unconsciously rejects the line that is false or out of character.

While this view presents, in the most satisfactory manner, the regular architectural features of this earth-born cathedral, we may vary the scene indefinitely by changing position. Thus, from a point a little higher and more distant, the stupendous height of the spire is more manifest, while a movement to the right develops a second group of pinnacles behind the first, and the change of perspective invests the whole scene with a wilder and more unearthly character. Indeed, within the charmed range fresh surprises and novel emotions attend on every step. I have made three several pilgrimages to Seneca, spending hours, and sometimes days, in the vicinity of the mighty shrine, yet feel that I have but half developed its fascinations.

And now having faithfully, and we hope satisfactorily, done the valley of the North Fork, we take regretful leave of its wonderful picture-gallery, and follow our adventurous artist across the bleak summits of the Alleghany, through miles of swampy laurel-brakes and dim hemlock-forests, to his camp in the mountain-wilds of Randolph County, where the streams run westward.

To one in the flesh the journey is tedious, tiresome, full of privations and difficulties; but to you, our friends of the cushioned chairs and worsted slippers, the transit shall be as brief and easy as though you sat upon that magic rug described in the "Arabian Nights."

And what can be the attraction here in this gloomy, dripping forest, where the high sun can scarcely penetrate, where the eye is refreshed by no vistas of blue distance, and where the artist hardly finds elbow-room or light enough to exercise his faculty?

Listen. We are here upon the broad, wooded summits of the great dividing ridge of Alleghany, about three thousand feet above the ocean-tides.

Have you observed all these pretty amber-tinted brooks fringed with flowering rhododendron, meandering quietly and unconsciously under the vaulted forest? Just below us flows the famous Blackwater through an awful rift nearly two thousand feet in depth. These younglings must join their mother in the briefest space, and it is glorious sport to see them do it. This is the land of water-falls. That pretty knack we have ac-

FALLS OF THE BLACKWATER.

quired of picturing the steady sitters of the North Fork will avail us little here; we must set our traps to catch the sunbeams as they flicker among the slippery water-spirits. Indeed, there is something decidedly stimulating in the change of elements. Life must have both music and motion, and, after a fortnight with those dusty roads, the haughty immobility of those lordly peaks, the death-like silence of those stony monuments, we had begun to feel as arid and passionless as if we had been studying in a sculpture-gallery or promenading a cemetery. Now it is deliciously refreshing to breathe this atmosphere of whirling spray, to witness the wild gambols of these frisky streams, to hear the chorus of their thousand voices, from the tinkling treble of the tiny rill to the thundering bass of the distant river, all timed and tuned to the merry dancing of the mountain Undines.

The first leap made by the Skillet Fork is forty feet in the clear, and thence without a halt she goes plunging down a break-neck stairway, with a descent of some four or five hundred feet in half a mile's distance, where she joins the main stream of Blackwater, while in our enthusiasm we clap our hands and roar out, "Weel done, Cutty-sark!" This initial plunge is selected by our artist as one of the best-arranged pictures to be found in the mountains, and, in rendering the subject, he has lost nothing of its graceful forms and effective disposition of light and shadow; but, after all, the real fascination of the natural piece is in the exquisite freshness and variety of its tinting.

The tender opal of the narrow strip of sky; the soft, bluish-gray border of distant forest appearing above the fall; the sparkling amber of the water mingling and contrasted with the snowy whiteness of the boiling spray; the dark plumage of the stately hemlock; the glistening foliage and delicate-pink bloom of the rhododendron; the gemmy greenness of the moss-carpeted rocks; the luscious splendor of the pool at our feet, like a dancing caldron of calf's-foot jelly crowned with whipped syllabub—all combine to form a natural picture before which the most ambitious art may hang its head. Yet this wild region is full of such scenes, some of them far surpassing this in grandeur, if not in beauty of details.

And, in conclusion, we may pertinently ask, Will not some one of our famous masters of landscape-art who have buried the Hudson and White Hills under mountains of canvas, and venturously plucked the mighty hearts out of the distant Andes and Rocky Mountains, condescend to accept this challenge from the virgin wilderness of West Virginia?

LAKE SUPERIOR.

WITH ILLUSTRATIONS BY WILLIAM HART.

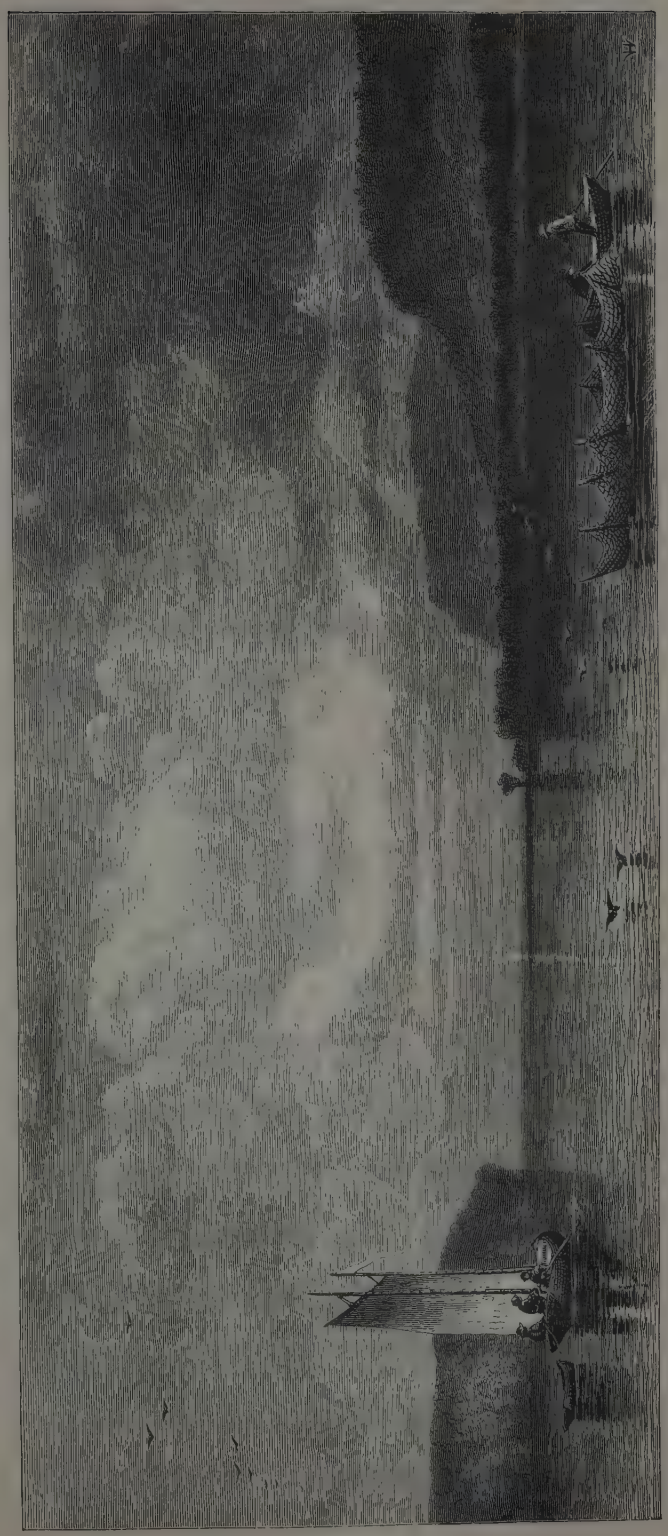
Grand Portal

TWO hundred and thirty-two years ago, the first white man stood on the shores of Lake Superior. Before him was assembled a crowd of Indians—two thousand Ojibwas and other Algonquins—listening, with curiosity, to the strange tidings he brought, and, in some instances, allowing the mystic drops to be poured upon their foreheads; for, like all the first explorers of the lake-country, this man was a missionary. Only religious zeal could brave the wilderness and its savages, cold and hunger, torture and death, for no hope of earthly reward, for no gold-mines, for no fountain of youth, but simply for the salvation of souls. And, whatever posterity may think of the utility of their work, it must at least admire the courage and devotion of these fathers, who, almost without exception, laid down their lives for the cause. What can a man do more? Five years later came the turn of this first white man of Lake Superior, murdered by the Indians in the forests near the Mohawk River.

Since that first visit, more than two centuries ago—a long time for fast-moving American history—the great lake has remained almost unknown to the world of books. Even now, while the far Pacific coast is pictured and described in all the magazines and newspapers of the day, portions of Lake Superior remain *terra incognita;* and, with the exception of dry surveys and geological reports, the libraries are barren of its very name. And yet the scenery is grand beyond the power of verbal description. Stored away in its bays are groups of islets, as fair as any in southern seas. All along the shore are water-falls, some silvery, some claret-colored, some falling two hundred feet over a sheer precipice, and others leaping down the cliffs in a long series of cascades. In parts of the coast, the sandstone rocks are worn and fretted into strange shapes of castles, faces, and figures, which stand out like sculpture; in others, the granite rocks rise like palisades, in fluted columns of red and silver; and, farther to the north, porphyry cliffs tower above the water—a perpendicular wall, thirteen hundred and fifty feet high—stern guardians of the silver at their base. Mirage of wonderful beauty is seen on the lake; and the Indians had many a tale of lost islands floating in charge of a *manitou*, veiled at his will in silver fog. Persons crossing from point to point in their bark canoes would bring strange tales of these islets; but, though they searched a lifetime through, they could never find them again.

Superior is four hundred and sixty miles long, one hundred and seventy broad, and eight hundred feet deep. Its general shape was best described by the French fathers, more than two hundred years ago, as "a bended bow, the northern shore being the arc, the southern shore the cord, and the long point the arrow." This long point is Keweenaw, a copper arm thrust out seventy miles into the lake from the south shore. Passing the Sault Sainte-Marie—called "Soo" in Western phraseology—Point Iroquois is seen on the west, and opposite the Gros Cap of Canada, six hundred feet high. There is a story connected with these points; and as, for once, the all-conquering Iroquois were conquered, it is worth relating, since the continuous victories of this fierce confederacy become at last wearisome to the student of lake-country history, and he feels inclined to take part with the poor, exterminated Eries and Hurons, who have left only their names on the lakes where they once lived. Up the western shore once came the Iroquois, and upon this point they fought a great battle, of two days, with the Chippewas of Superior, defeating them with heavy loss. The remnant paddled across to Gros Cap in their canoes, and there, on the shore, they watched the fires of their enemies, who, flushed with triumph, danced and sang through most of the night, and at last, toward dawn, fell heavily asleep. Then swiftly paddled the Chippewas back again, and slew them, one and all, while they slept. As the story says, "not an Iroquois looked out upon the lake ever again." The Chippewas left the bones of their enemies bleaching on the shore, and for years they whitened the point, plainly visible for miles, the glory of all the lake Indians.

Beyond Iroquois stretches long White-Fish Point, and, this turned, the Sables come into view—sand-dunes hundreds of feet high, golden by day, crimson at sunset, and silver by night; beautiful to the eyes of the artist, but desolate to the sailor, who, in all this stretch of eighty miles, can find no safe harbor in a storm. Back of the Sables lies a wilderness — part of the peninsula which belongs to a State whose boundary-line it nowhere touches, and which was thrown in as a make-weight to keep the peace with Ohio. In 1835, the State of Michigan wanted a strip of land, eight miles wide, upon her southern border, to which Ohio also laid claim, and the quarrel waxed so fierce that both sides, under their respective governors, raised troops, and marched out to the disputed boundary. Here the Ohio governor, strong in tactics, began to build a military camp, while his antagonist, apparently of a fiercer disposition, rode boldly into Toledo, laid waste the water-melon patches and

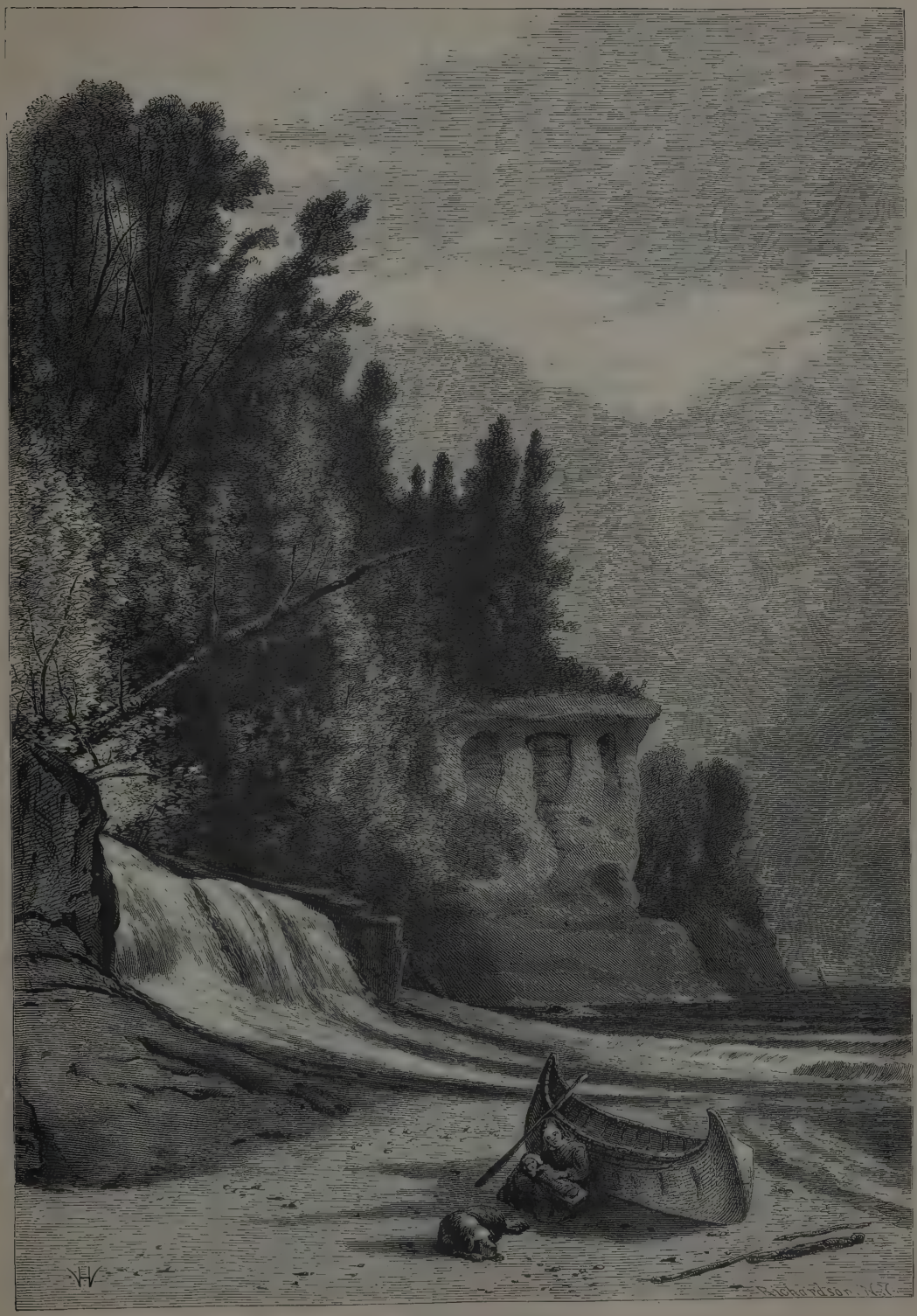


Munesing Harbor.

chicken-coops, attacked and demolished an ice-house, and, bursting in the front-door of the one officer residing in the town, carried him back into Michigan in triumph, a veritable prisoner of war. The dispute was afterward settled in Congress, and Michigan unwillingly gave up the eight miles in exchange for this upper peninsula, which has since proved a vast mineral storehouse, whose treasures, although not yet half developed, supply the whole nation, and are crossing the ocean to the Old World.

Beyond the Sables lie the Pictured Rocks. Leaving the steamer at Munesing, and taking a Mackinac boat or an Indian canoe, in order to explore this wild region, and seek, in their fastnesses, the wonders which will not reveal themselves to the mere passer-by, one is at the start filled with admiration for Munesing Harbor. It is land-locked, the high hills rising all around, and off its mouth lies Grand Island, in itself romantically beautiful, although almost unnoticed on this coast of marvels. Munesing was to have been a great city; so said Philadelphia. But the Iron Mountain, farther westward, carried the day, and built up the city on its own shore, naming it after the greatest of the French missionaries, Father Marquette.

The Pictured Rocks stretch from Munesing Harbor eastward along the coast, rising, in some places, to the height of two hundred feet from the water, in sheer precipices, without beach at their bases. They show a countless succession of rock-sculptures, and the effect is heightened by the brilliancy of the coloring—yellow, blue, green, and gray, in all shades of dark and light, alternating with each other in a manner which charms the traveller, and so astonishes the sober geologist that his dull pages blossom as the rose. It is impossible to enumerate all the rock-pictures, for they succeed each other in a bewildering series, varying from different points of view, and sweeping, like a panorama, from curve to curve, mile after mile. They vary, also, to various eyes—one person seeing a castle, with towers, where another sees a caravan of the desert; the near-sighted following the tracery of tropical foliage—the far-sighted pointing out a storied fortification, with a banner flying from its summit. There are, however, a number of the pictures so boldly drawn that all can see them near or far, even the most deadly-practical minds being forced to admit their reality. Passing the Chimneys and the Miner's Castle, a detached mass, called the Sail Rock, comes into view; and, so striking is its resemblance to a sloop, with the jib and mainsail spread, that, at a short distance out at sea, any one would suppose it a real boat at anchor near the beach. Two headlands beyond this is Le Grand Portail, so named by the *voyageurs*—a race now gone, whose unwritten history, hanging in fragments on the points of Lake Superior, and fast fading away, belongs to what will soon be the mythic days of the fur-trade. The Grand Portal is one hundred feet high by one hundred and sixty-eight feet broad at the water-level; and the cliff in which it is cut rises above the arch, making the whole height one hundred and eighty-five feet. The great cave, whose door is the Portal, stretches back in the shape of a vaulted room, the arches of the roof built of yellow sandstone, and the sides fretted



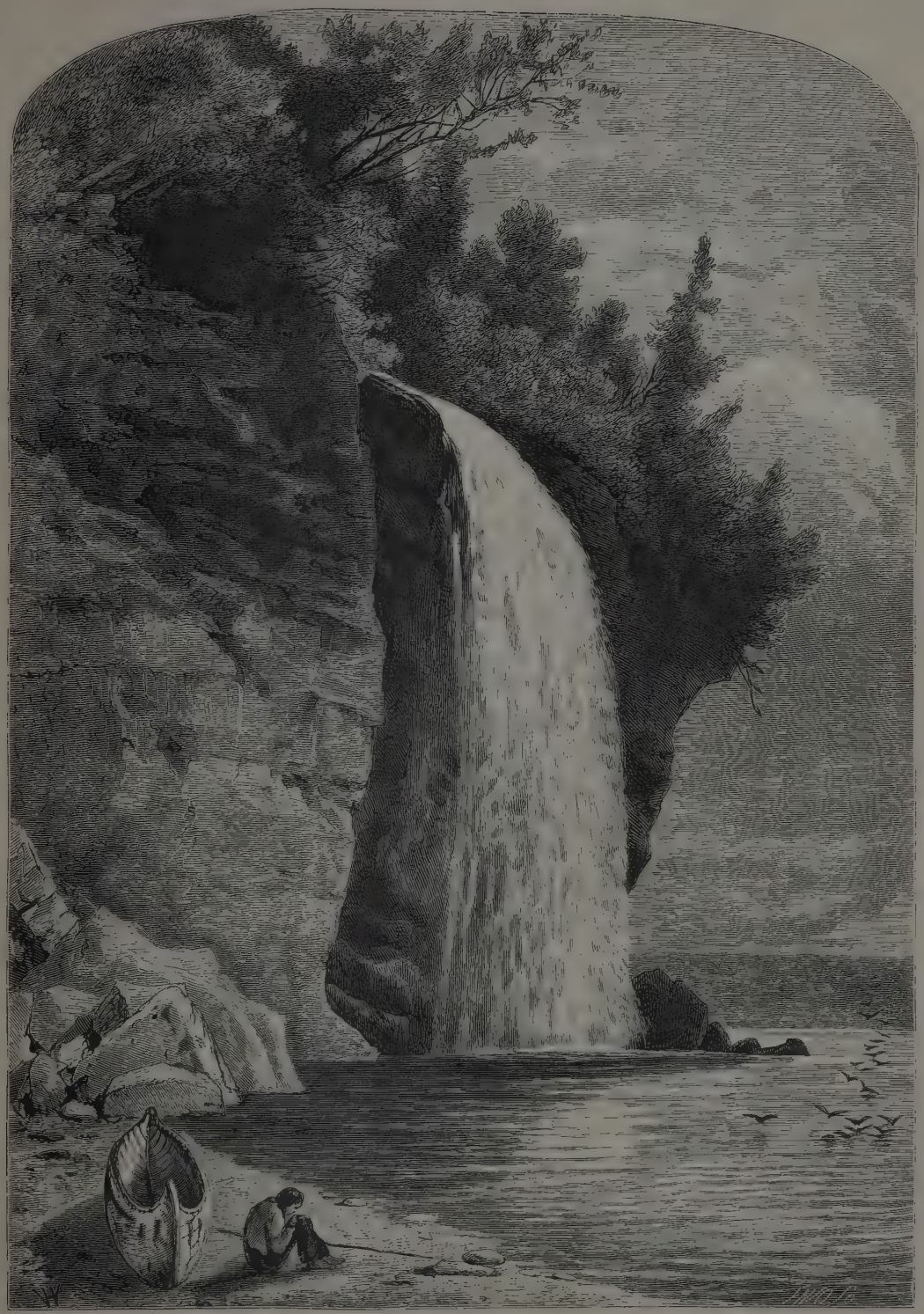
CHAPEL BEACH.

into fantastic shapes by the waves driving in during storms, and dashing up a hundred feet toward the reverberating roof with a hollow boom. Floating under the Portal, on a summer day, voices echo back and forth, a single word is repeated, and naturally the mind reverts to the Indian belief in grotesque imps who haunted the cavern, and played their pranks upon rash intruders—pranks they still play, and dangerous ones, too, for the whole coast of pictures is dreaded by the lake-captains, and not a few craft have gone down close to the shore, lost in treacherous fogs.

Farther toward the east is La Chapelle of the *voyageurs*. This rock-chapel is forty feet above the lake—a temple, with an arched roof of sandstone, resting partly on the cliff behind, and partly on massive columns, as perfect as the columned ruins of Egypt. Within, the rocks form an altar and a pulpit; and the cliff in front is worn into rough steps upward from the water, so that all stands ready for the minister and his congregation. The colors of the rock are the fresco; mosses and lichens are the stained glass; and, from below, the continuous wash of the water in and out through holes in the sides is like the low, opening swell of an organ voluntary. A manitou dwelt in this chapel—not a mischievous imp, like the sprites of the Portal, but a grand god of the storm, who, with his fellow-god on Thunder Cape, of the north shore, commanded the winds and waves of the whole lake, from the Sault to Fond-du-Lac. On the chapel-beach the Indians performed their rites to appease him; and here, at a later day, the merry *voyageurs* initiated the tyros of the fur-trade into the mysteries of their craft, by plunging them into the water-fall that dashes over the rocks near by—a northern crossing-the-line.

The Silver Cascade falls from an overhanging cliff, one hundred and seventy-five feet, into the lake below. The fall of Niagara is one hundred and sixty-five feet, ten feet less than the Silver, which, however, is but a ribbon in breadth, compared to the "Thunder of Waters." The Silver is a beautiful fall, and the largest among the Pictures; but the whole coast of Superior is spangled with the spray of innumerable cascades and rapids, as all the little rivers, instead of running through the gorges and ravines of the lower-lake country, spring boldly over the cliffs without waiting to make a bed for themselves. Undine would have loved their wild, sparkling waters.

The coast of Pictures is not yet half explored, nor its beauties half discovered; they vary in the light and in the shade; they show one outline in the sunshine and another in the moonlight; battlements and arches, foliage and vines, cities with their spires and towers, processions of animals, and even the great sea-serpent himself, who, at last, although still invisible in his own person, has given us a kind of rock-photograph of his mysterious self. In one place, there stands a majestic profile looking toward the north—a woman's face, the Empress of the Lake. It is the pleasure of her royal highness to visit the rock only by night, a Diana of the New World. In the daytime, search is vain, she will not reveal herself; but, when the low-down moon shines across the water, behold, she appears! She looks to the north, not sadly, not sternly, like the Old Man



SILVER CASCADE.

of the White Mountains, but benign of aspect, and so beautiful in her rounded, womanly curves, that the late watcher on the beach falls into the dream of Endymion; but, when he wakes in the gray dawn, he finds her gone, and only a shapeless rock glistens in the rays of the rising sun.

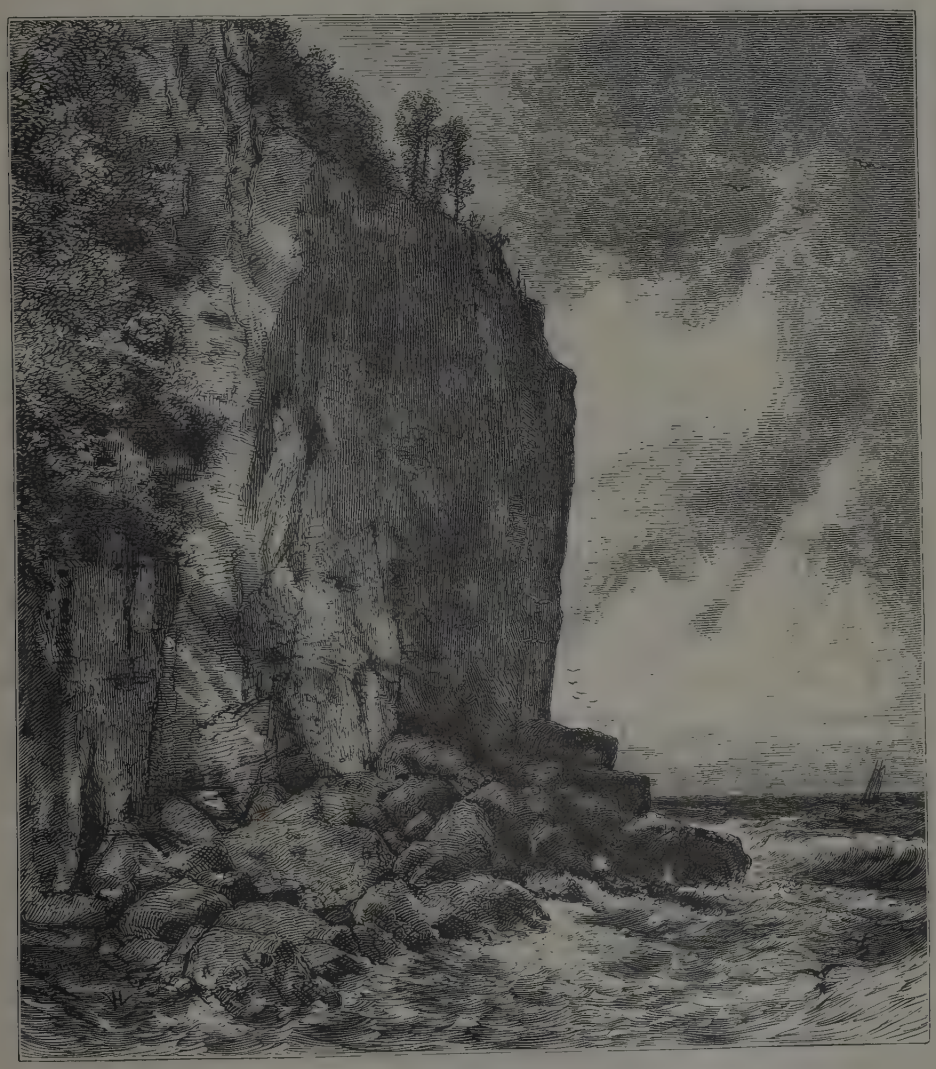
Leaving the Pictures, and going westward past the Temples of Au-Train and the Laughing-Fish Point, Marquette comes into view, a picturesque harbor, with a little rock

Empress of the Lake.

islet, the outlet for the Iron Mountain lying back twelve miles in the interior, a ridge of ore eight hundred feet high, which sends its thousands of tons year after year down to the iron-mills of Cleveland, Pittsburg, and Cincinnati, and scarcely misses them from its massive sides. A fleet of hundreds of vessels belongs to this iron-bound coast; their sails whiten the lakes from the opening of navigation to its close; they are the first to start when, in the early spring, word comes that the ice is moving, and the last to leave when, in the late fall, word comes that the ice is making. Perilous voyages are theirs,

in the midst of grinding ice; and sometimes they are caught in the fierce storms of Superior, going down with all on board off the harborless coast of the Pictured Rocks or the Sables.

The iron shoulders passed, next comes the copper arm of Keweenaw, the arrow in the bow; the name signifies a portage; and the Indians, by crossing the base of the



Great Palisade.

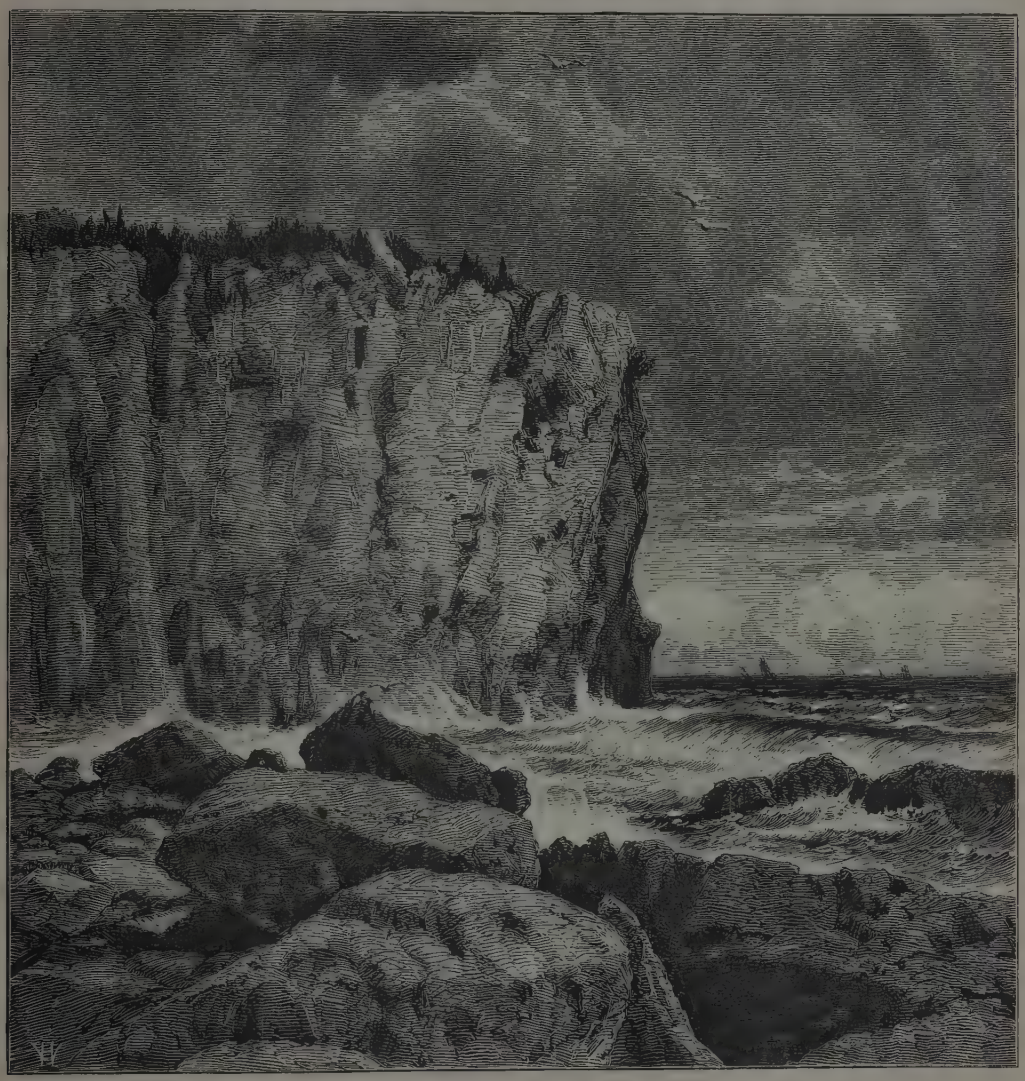
point through Portage Lake and its streams, saved the long ninety miles around it. This copper arm has its history. Centuries ago its hills were mined, and the first white explorers found the ancient works and tools, and wondered over them; when they were tired of wondering, they ascribed them to the extinct Mound-Builders, whoever they were, a most convenient race, who come in for all the riddles of the Western country,

and never rise from their graves to say us No. The Chippewas of Superior were full of superstitious fear regarding Keweenaw Point; they believed that a demon resided there, and dared not visit his domain to procure copper, without first propitiating him with rites and gifts; then, trembling and in silence, they lighted fires around some exposed mass of the metal, and, when it was softened, they hastily cut off a small quantity, and fled to their canoes without looking back. So strong was their dread that, for many years, the explorers were unable to obtain from them any information about the Point, neither would they act as guides, although tempting bribes were offered. Then came the geologists, unwilling to believe that native copper existed in such a locality, but forced to concede the fact when solid masses of five hundred tons confronted them. Gradually they found that this long point held the greatest copper-mines of the world, those of the Ural Mountains, in Russia, sinking into insignificance in comparison with them; and, upon this discovery, speculation started up, and fortunes were made and lost in the Eastern cities in copper-stock by men who barely knew where Keweenaw was, as they tossed it like a football from one to another, and jabbered off its Indian name with easy fluency. Throughout this excitement, and after it died away, however, the Point kept steadily producing its copper from the hills and along-shore, until now not only does it supply the whole country, but is even crossing the ocean to aid the Old World. On Keweenaw are several lakes, among them the lovely Lac-la-Belle of the *voyageurs;* the north shore of the Point is bold with beautiful rock-harbors, and beyond Ontonagon, the western end of the copper-region, rise the Porcupine Mountains. At Montreal River Michigan ends, and Wisconsin pushes forward to share a part of the rich coast.

Farther to the west is the beautiful group of the Apostles; this name brings up again the memory of the early missionaries, who came to these islands as far back as 1669, Father Marquette himself, the central figure of the lake-country history, having spent some time here at La Pointe, on Madeline Island. It was while attending to this mission that he first heard of the Mississippi, or Great Water, from the Illinois tribes, who were attracted to La Pointe by the trinkets distributed by the French. The idea of seeking out this wonderful river dwelt in his mind from that time, but he was not permitted to go until several years later, entering its waters at last in June, 1673, with, as he writes in his journal, "a joy I am not able to express." An antiquated Roman Catholic chapel still stands at La Pointe, where the Indians and half-breeds assemble to receive instruction from an old French priest.

The islands, of which, by-the-way, each apostle might take two, are all beautiful, a lovely archipelago, contrasting with the sterner coast to the north and east. At Bayfield, on the main-land opposite, is the United States agency for the Chippewa Indians, and here they receive their annual payment, coming in from all quarters in their canoes, and showing not a few noble outlines among the young men, and not a few faces

worthy of admiration among the younger maidens. There is yet some romance left on Lake Superior, in spite of the prosaic influence of the Cornish miners and Yankee capitalists. It is but a few years since a young man of education and refinement, while paddling a canoe along-shore, came suddenly upon an Indian girl standing on the beach. She was so beautiful that he could not forget her, and, after some days, he sought the



Cliff near Beaver Bay.

place again, and found her with her parents in their wigwam. In spite of himself, and with all the world and its influence against it, his fancy grew into love. The father heard of the infatuation, and in haste sent his son eastward for a year's visit among the Atlantic cities, hoping that the change and an insight into fashionable life would wean him from his dark-skinned love. But no; for a time after his return he did not speak

of her, neither did he seek the wigwam. But suddenly it all came back in an hour, and one morning he was missing, nor could any trace be found until an old fisherman brought word that he had seen the youth paddling toward the west in a canoe, with the Indian girl in the stern, decked in all her finery of feather-work and beads. The bride was a Roman Catholic, like most of the Chippewas, and the two were married by a mission-priest. The father pursued, but it was too late.

At the head of Lake Superior is the St. Louis River; here Wisconsin ends and Minnesota begins. The town of Duluth, named after a French explorer who visited its site in 1680, is but three years old, and yet is called the Chicago of Lake Superior; it

Baptism Bay.

has four thousand inhabitants, and stands at the extreme western end of the Great Chain. Quebec stands at the eastern end, for the St. Lawrence beyond is but an arm of the sea; and seventeen hundred and fifty miles lie between. Beyond Duluth begins the North Shore; and these words call up visions of grandeur, of gold and silver, of adventure and danger, not unlike the dreams of the first white men on the shores of Mexico. The long coast, the arc of the bow, is even now but vaguely known, for, although a few settlements have been made where silver exists, they are but dots on the line, and the map-makers are obliged either to leave their paper blank, or fill it up from imagination and the vague stories of the hunters. The veil of mystery adds, no

doubt, a charm; but, nevertheless, the surveys, as far as they have gone, verify the visions, and the silver sent down to the lower-lake towns fairly exceeds the descriptions of the discoverers.

Until within a few years the north shore has been traversed only by the hunters, trappers, and *voyageurs* of the Hudson's Bay Company; more than half of its length is their rightful territory, and scattered along its line are several of their forts, with their motley inhabitants. This company was formed in London in 1669, under the leadership

Temperance Harbor.

of Prince Rupert, and afterward obtained a charter from Charles II., granting "the sole right of trading in all the country watered by rivers flowing into Hudson's Bay;" this right was soon stretched until it included the whole of British America, and as much of the United States as the hunters found convenient. There were four departments: the Northern, which embraced the icy region near the arctic circle; the Eastern, along the St. Lawrence and its tributaries; the Southern, lying on the shore of Lake Superior; and the Western, which took in the immense country west of the Saskatchewan, as far as the Pacific Ocean and the Columbia River, where John Jacob Astor made his brave

fight, single-handed, with the vast corporation, and failed, solely on account of the incapacity or infidelity of his agents.

All through the north coasts of Superior roamed the company hunters; along the hundreds of little lakes and streams the *voyageurs* paddled their canoes, trading with the Indians and gathering together the furs, which, packed in bales, were sent eastward from post to post, until they reached the ocean, where the company vessels carried them to England. The head men were generally English or Scotch, but the *voyageurs* were French and French half-breeds; and it is noteworthy that the quick imaginations of the latter class have given the names to most of the points, bays, and cliffs of the lake, while the more stately English titles are entirely forgotten, save in the old journals of some chief factor, where they languish unnoticed by posterity, which goes on talking of "Bête Grise," "Grand Marais," "Presqu'isle," "Bois Brulé," and "L'Anse à la Bouteille," as though it preferred them to the names of English royalty and nobility.

A merry race were the *voyageurs*, and the memory of their songs still lingers in the ears of old lake-captains and sailors of the generation almost passed away; and yet it is impossible now to get either words or tunes—a few of the titles only remain.

"They always sung, and kept time with their paddles," said an old sailor recently. "The tunes were wild-like, but mighty sweet, and the words were French. The steersman would begin, and then all would join in at the last two lines and chorus. They never could do any thing without singing."

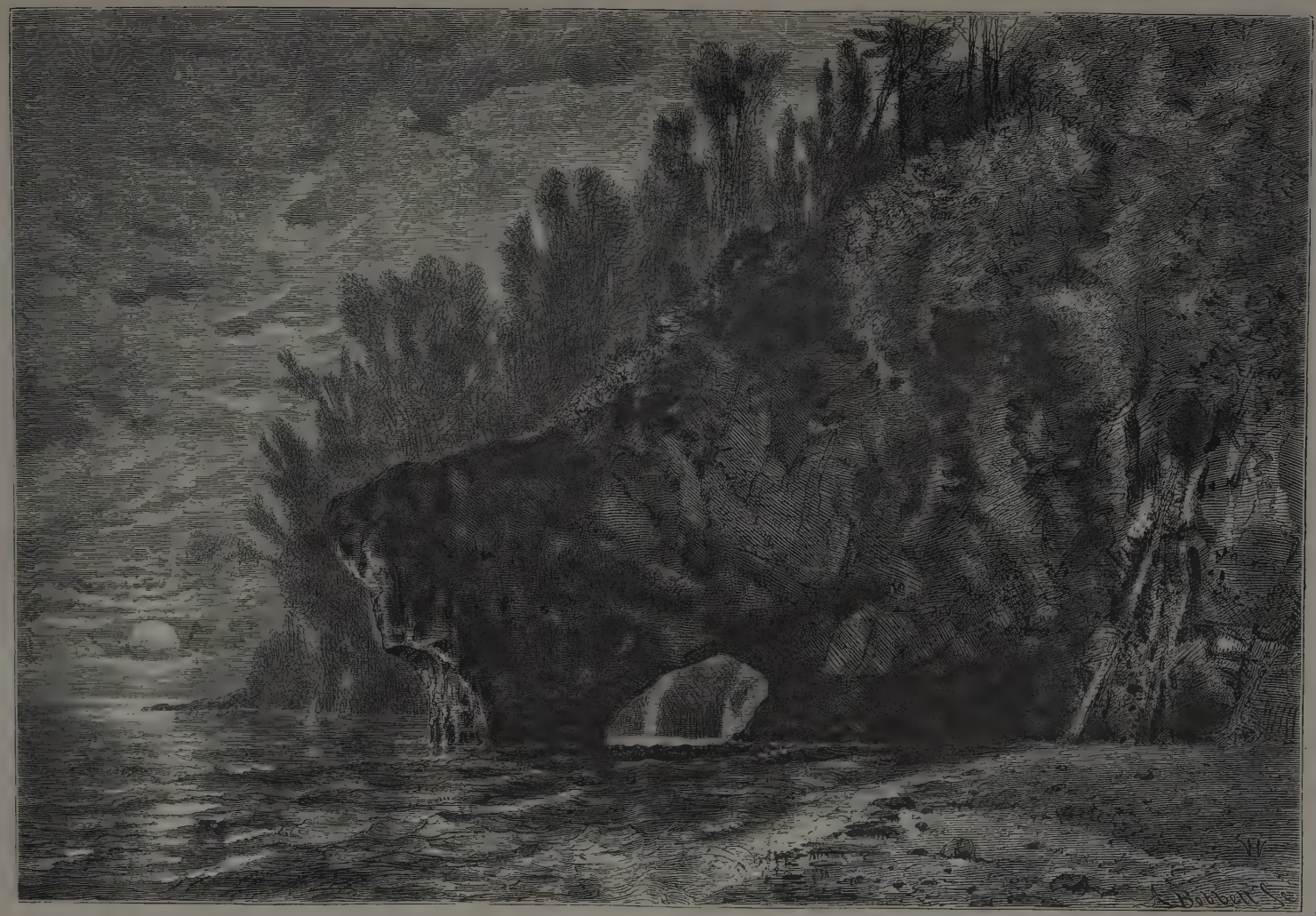
"But can you not recall even one of the airs?"

"No, no; I've forgot them all. But they were sweeter than the tunes are nowadays."

The shore of Superior, north of Duluth, rises into grand cliffs of greenstone and porphyry, eight hundred to one thousand feet high. The Great Palisade, a remarkable rock-formation, is moulded in columns up and down, more regular than the Palisades of the Hudson. The rock is of a red color, and the minute quartz-crystals scattered over its face cause it to gleam in the sunshine like a wall of diamonds. It stands almost entirely detached from the main-land, and, at a short distance out at sea, might be said to resemble a row of plants growing upward, side by side, from the water, like giant lily-stalks.

The cliffs of Beaver Bay are wild and rugged; and yet, dangerous as they appear, here is one of the good harbors of the north shore.

Baptism, or Baptême, River, beyond the Great Palisade, comes dashing down to the lake in a series of wild water-falls, with a wall of rocks on one side, through which it has cut a gate-way for itself when the storms build up a sand-bar across its natural mouth. The Indians called the stream the "River of Standing Stones;" but the *voyageurs* named it "Baptême," probably from some mission or work of conversion on its banks, although the sailors of to-day declare that it was so called because a persistent

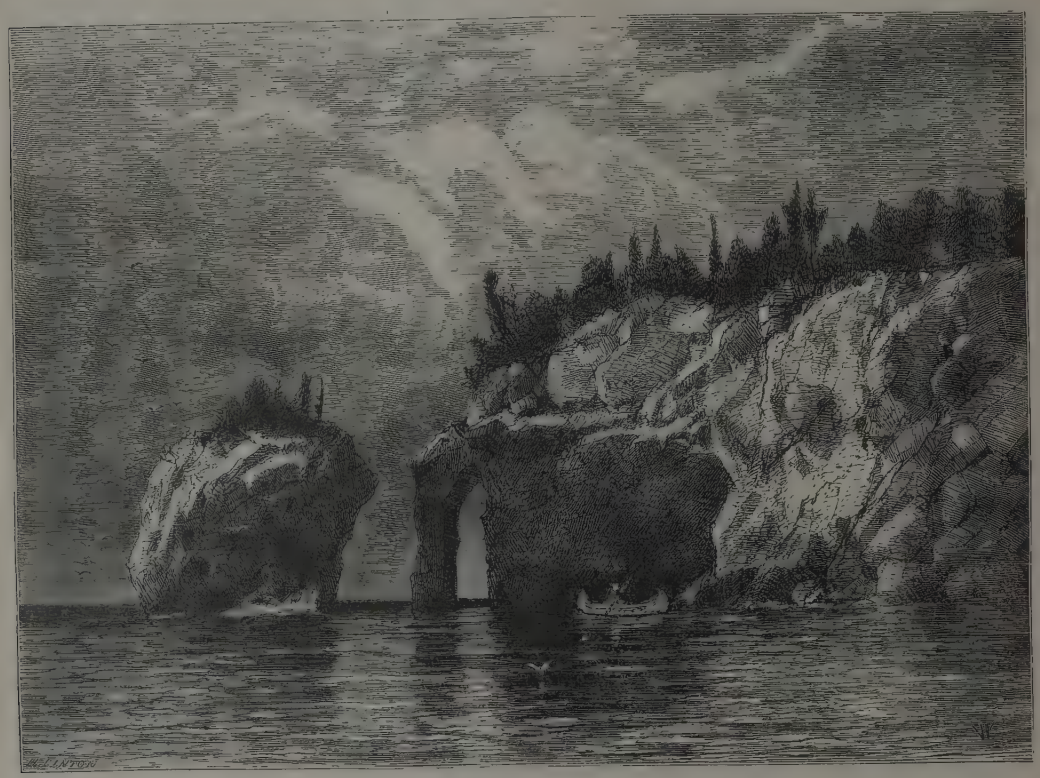


SPIRIT HARBOR.

scoffer fell in accidentally, and, as a priest was standing by, he baptized the man in spite of his objections.

Whether or not the *voyageurs* were the authors of the pun—the one pun of Lake Superior—is not known; but it must be confessed that the witticism has a modern sound. It is attached to the beautiful harbor of Temperance River, which is said to have been so called because there was no bar at the mouth!

The portion of Minnesota lying back of this coast is a wilderness, with vague



Island No. 1.

rumors of precious metals hidden in its recesses. At Pigeon River is the boundary-line between the United States and Canada; and here begins the Grand Portage, where, through a series of lakes and streams, the very names of which have a wild sound—Rainy Lake, Lake of the Woods, and Winnipeg—the *voyageurs* were enabled, with short portages, to take their canoes through to the Saskatchewan and the Red River of the North.

The whole Canadian shore is grandly beautiful in every variety of point, bay, island and isolated cliff. Passing Fort William, an important post of the Hudson's Bay Company, Thunder Cape is seen—a basaltic cliff, thirteen hundred and fifty feet high, upon the summit of which rest the dark thunder-clouds, supposed by the Indians to be giant birds brooding upon their nests. At the foot of this cliff, near the shore, is Silver Isl-

and, whose low surface, over which the waves have dashed at will, is now diked and protected in every precious inch. The silver, however, is not confined to this little dot in the water; it has been traced to the main-land, and the latest maps bear the six magic letters stretched generously back over an indefinite space of wilderness heretofore blank paper. The tales of Silver Island are like pages of "Monte Cristo." "At one blast, out of the shaft came two tons, valued at four thousand dollars per ton." "The company commenced building breakwaters September 1st; and, before the close of navigation, they had completed their erection, and had mined twenty-two days, with the result of one hundred thousand dollars' worth of ore." These accounts have sent hundreds of explorers and emigrants into this wild region during the last year, and the excitement is augmented by the rumor of gold-mines lying west of Thunder Bay. The great lake now needs only a diamond to complete its encircling crown of treasures.

Neepigon Bay, or the Bay of Clear Waters, is forty miles long by fifteen broad and contains a number of islands. The river which flows into this bay comes from a lake which has, until lately, been as vaguely known as the sources of the Nile. The hunters told of it, the Indians added their descriptions, until gradually the idea grew into existence that it was as large as Lake Erie. The recent surveys ordered by the Canadian Government show that it is seventy miles long and fifty broad, with copper-producing rocks and probably a thousand islets or more. It lies back about thirty miles from Lake Superior.

Beyond Neepigon Bay eastward, the coast, studded with water-falls the hues of which are sometimes a bright-claret color of varying shades, stretches for miles entirely uninhabited, save by a few Indians. Hunting-parties from the lower-lake towns camp along the beach occasionally during the summer months; but the region is as wild as it was in the days before Columbus.

At Pic River is a post of the Hudson's Bay Company; and here the shore-line bends to the south, and the lake begins to narrow toward the Sault. At Otter-Head the cliff rises, in a sheer precipice, one thousand feet from the water, and on its summit stands a rock like a monument, which on one side shows the profile of a man, and on the other the distinct outline of an otter's head. The Indians never passed this point without stopping to make their offerings to its manitou. Still farther south is the broad bay of Michipicoten, or the "Bay of Hills;" and here is another post of the Hudson's Bay Company. From here to the Sault, all along the shore, minerals of various kinds have been found; and, as the country is opened, it is probable that this half of the north coast of the lake will yield as many treasures as the United States side. There are a number of islands in the lake, many of them unnamed and unnoticed, but worthy of description on canvas, so full are they of wild beauty. Their time will yet come. Among the large islands are "Michipicoten," "Saint-Ignace," and rugged "Pic" (Pie); and farther west is Isle Royale, the largest in the lake, forty-five miles in length, and

LA CROSSE HARBOR.

attached, by some legislative freak, to Houghton County, Michigan. If any thing can be called old in the mining history of Lake Superior, this island deserves the name; and since, in the rapid progress of the New World, twenty-five years should be considered as an equivalent for a century or two of the old, Royale may well be called an ancient settlement; for, as far back as 1847, miners, geologists, capitalists, and vessels, were all there; enthusiasm waxed high, fortunes shone in the air, and the whole lake-country rang with the name and praises of the wonderful island. Royal, however, it did not prove, in spite of its name; and, one by one, the capitalists came back to civilization with empty purses, and all faith in Lake Superior gone forever. Copper exists on the island, but not in quantities to rival the great masses of Keweenaw Point; and now Isle Royale is again solitary, its old log-cabins and deserted mines giving it a venerable aspect, and its very light-house abandoned. But, in spite of this ignominy, it is full of beauty, with castellated and columned cliffs of trap-rock, rising directly up from water so deep that the largest vessel might lie in safety within touching distance.

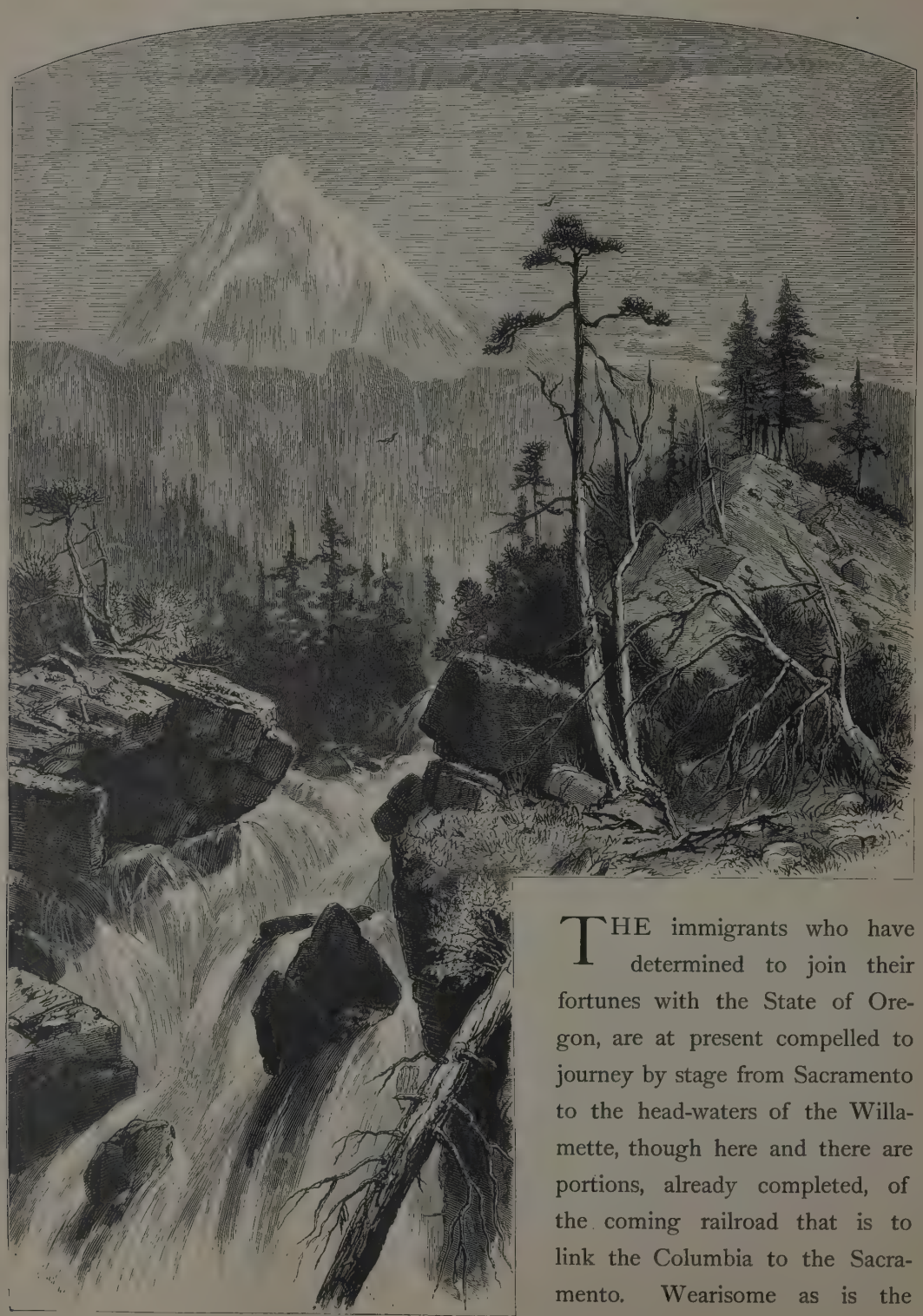
The storms of Lake Superior are often violent, but not so dangerous as the storms of the lower lakes, for Superior has more sea-room; the waves, although of great height and force, are regular and united when compared with the short, chopping seas of Erie and Michigan. On shore, however, the storms of Lake Superior seem terrific; and the ocean itself cannot show a more stormy expanse than the great lake in a September gale.

Few of the poets have as yet reached Superior. One, however, has made the great lake the scene of the final disappearance of Hiawatha, and the lines are no inapt representation of the final disappearance of the Indian race from among men:

"On the shore stood Hiawatha,
Turned and waved his hand at parting;
On the clear and luminous water
Launched his birch-canoe for sailing;
From the pebbles of the margin
Shoved it forth into the water;
Whispered to it, 'Westward! westward!'
And with speed it darted forward.
And the evening sun descending
Set the clouds on fire with redness;
Burned the broad sky, like a prairie;
Left upon the level water
One long track and trail of splendor,
Down whose stream, as down a river,
Westward, westward, Hiawatha
Sailed into the fiery sunset,
Sailed into the purple vapors,
Sailed into the dusk of evening."

NORTHERN CALIFORNIA.

WITH ILLUSTRATIONS BY R. SWAIN GIFFORD.



THE immigrants who have determined to join their fortunes with the State of Oregon, are at present compelled to journey by stage from Sacramento to the head-waters of the Willamette, though here and there are portions, already completed, of the coming railroad that is to link the Columbia to the Sacramento. Wearisome as is the

transit in the immigrant-wagon, it is generally preferred, by those whose destination is Southern Oregon, to the sea-voyage round to Portland, and thence by steamer down the Columbia and its tributaries. The valley of the Sacramento, at first with an undulating surface, and diversified with earth-waves crowned with noble oaks, as we ascend northward spreads out into treeless prairies, as flat as those of Illinois. The first break in the monotony of the expanse is made by the Marysville Buttes — a short range of low, volcanic hills, which rise suddenly out of the prairie. The town of Marysville is at some distance, and is on a tributary of the Sacramento, called the Feather River; but the Buttes loom up from the eastern bank of the Sacramento, which here is lined with alders and cotton-trees. The latter are broad and umbrageous, but not high, and their dark-green foliage contrasts pleasantly with the gloomy brown hues of the fire-born hills. Native grape-vines trail along the ground, and cling

Marysville Buttes.

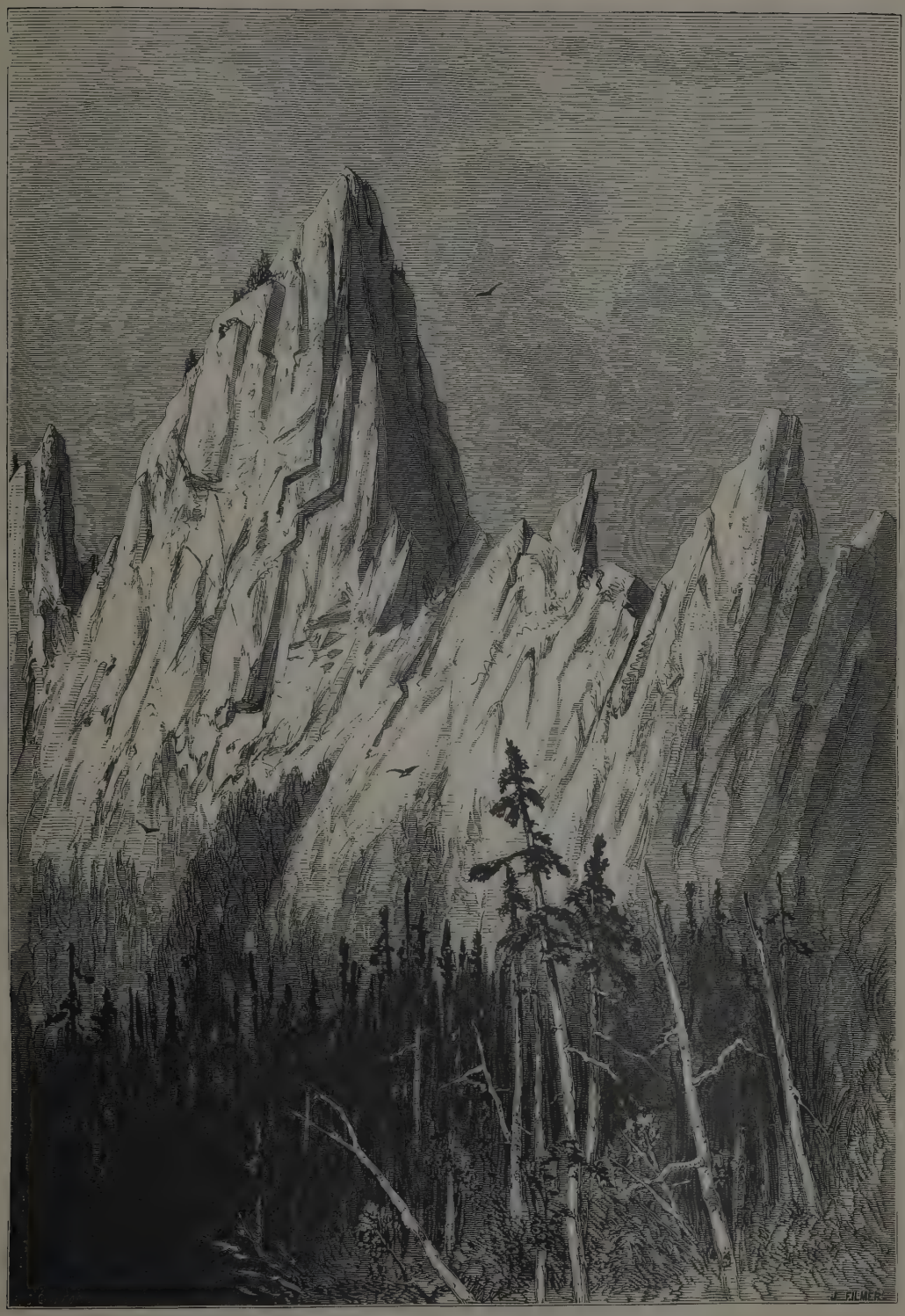
around the trunks of the trees, hanging like Arcadian curtains, and making picturesque bowers, unheeded by the inhabitants of the various ranches, who are somewhat prosaic in character, and given much to considerations of profits in wheat-raising. Between these one catches glimpses of the river, flowing onward with a still, deep current, reflecting placidly the masses of green foliage, and the trailing vines, and the white sails of the small vessels gliding downward with the tide. Deep pools here and there give back the blue of the cloudless sky; and, as a bass accompaniment, come in the dark shadows of the Buttes, with their sharply-drawn angles and their truncated cones. The slopes that rise from the banks have a very gradual ascent, and are dotted with ranches, pleasantly hid by orchards and vineyards. High up as far as vegetation goes the cattle graze; but, from the acuteness of the sides above the slopes, little earth can cling to them, and therefore they present a bare and hungry appearance, intensified by contrast with the smiling river, and the slopes blessed by Pomona and by Ceres. Not altogether deserted are these barren crests; for, where the cattle do not care to stray, the sportsman is sure of finding the California hare, whose numbers seem infinite. The flesh is capital, save where the animal feeds entirely on the wild-sage, which gives it an intensely bitter taste. Looking from the cones of these hills to the right and left, the eye glances over miles upon miles of flat plains, where fields of wheat succeed to vineyards and to groves of oak, broken only by the wooden buildings of the settlers. In the far distance can be faintly discerned the undulations of the foot-hills on either side—the first indications of the Coast Range to the left and the Sierra Nevada to the right.

When the traveller gets to the Lassens Buttes, he has reached the first mountains which are capped by perpetual snows. The river winds at the feet of these giants of stone, and its banks begin to show traces of the higher ground, in the degeneration of the cotton-wood-trees, and the improvement in the appearance of the oaks, which here are very lordly. The trunks are huge; and, though the height is not remarkable, the spread of the boughs is enormous, and the shade afforded is singularly refreshing to men and beasts fainting under the fierce sun. Not only are the banks crowned with groups of these trees, but the low, brown hills at the foot of these snow-clad summits are fairly embowered in their luxuriant groves. They impress the beholder forcibly as being very old, not only from the immense reach of their huge boughs, but from the masses of mistletoe that live upon their trunks. Seen in the early morning, when enveloped in sombre mist, they give a mysterious beauty to the bases of the mountains at this point. When the word has gone forth among the caravans of immigrants to get ready the morning's meal, preparatory to resuming the journey, the scene is one of peculiar beauty. Above is the vault of intense blue, with the stars glittering like "patens of bright gold." A few faint, rosy clouds fleck the heavens, and reveal the iridescent splendor of the snowy crests, which glow with all the colors of the opal or of an iceberg. The shadows from these summits are of the most brilliant purple, and blend slowly and gradually with the

LASSENS BUTTE, SACRAMENTO VALLEY.

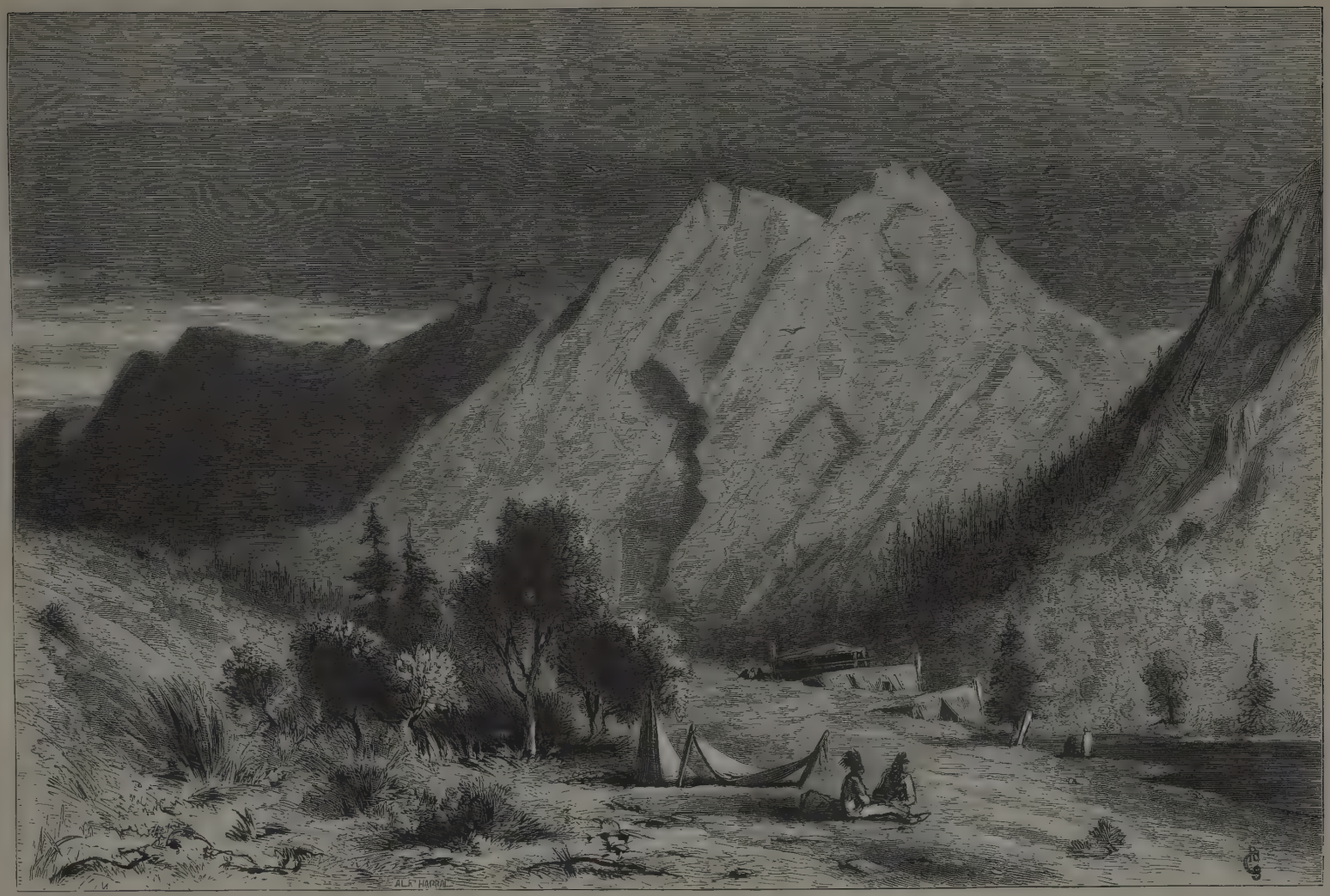
dull brown of the mountain-sides. The veil of mist, exquisitely thin and transparent half-way up, permits the eye to detect the scars and hollows channelled by fire and storm in the rude, volcanic sides. As the base is reached, the thickness of this silvery veil increases, until it hides every thing in its fleecy folds, save where, comparatively close at hand, the groups of oaks detach themselves from the mountains, and add an additional awe and mystery to the glory of the sunrising. Looking southward, the river, that before flowed with such a quiet, slumberous current through groves of alders, and clumps of cotton-wood, and curtains of clustering vines, laden in autumn with purple grapes, has now roused itself to energy, and courses along with a hoarse murmur, battling with the bowlders and the fragmentary rocks that have fallen into its bed and dispute its passage. Beyond the river, stretches the interminable prairie, where the fields of harvested wheat lie wrapped in slumber; and not a single ranch gives even a token of life. The light, stealing upon the broad shadows, first touches the tops of the prairie-wagons, and glorifies the brass ornaments of the patient mules. Then, making more and more progress, it shines upon the broken and fragmentary huts that Indians have left, and at last, in full glory of splendor, brings out the yellow of the cultivated fields and the coarse brown of the sandy soil. Where farming has not been attempted, the plain is covered with a stunted vegetation, diversified with the bitter-sage. There are frequent indentations of wagon-wheels, for these mountains are a spur of the Sierra Nevada, and this trail goes up to the mining regions. By this route most of the freight for that rough part of the world is carried, and the wagons come back laden with dull ingots of precious silver. The American ranch, where the accompanying view was taken, is never without scores of guests either going or returning to the mining territories of Northeastern California. To them the great cone of the extinct volcano is a well-known landmark, with whose appearance they are perfectly familiar. It remains in sight for days after it has been left behind.

The trail of the intended railroad now strikes into the deeply-wooded valley of Pitt River. This is reached through a road constantly ascending through sunny valleys, and among brown hills covered with superb oaks. On the crest that surmounts the valley of the Pitt, fine pines are reached, which are grouped in masses considerable enough to be styled a forest. This extends along the line of the river which, cutting its way through the Sierra, falls toward the west in a series of white, tumultuous rapids. Rising directly from this pine-laden crest is a range of granite and limestone rocks, which attains an elevation from the plain of three thousand feet, and is broken into a multitude of ragged forms. The granite is a bluish gray, which relieves the dazzling white of the limestone. When the sun shines upon the latter, the observer can hardly tell it from marble, so brilliant is its snowy hue. The line of these singular hills is of considerable length, extending, indeed, along the whole valley of the Pitt. When the crests are of granite, the forms are of that bold, bluff character so peculiar to crystalline rocks, but,



CASTELLATED ROCK

where they are of limestone, their appearance is finely castellated. The peaks have been wrought, by the cunning hand of Nature, into the guise of gigantic castles of the El Dorado land. Battlement and bartizan and huge donjon-keep present their sharp angles and clearly-defined walls against the brilliant blue of the California sky. Here and there coniferous trees have attained a root-hold on the almost perpendicular walls, and flaunt their branches like the banners of a proud castellan. Nor is sound wanting to complete the illusion, for the shrill scream of the bald-eagle is heard from the loftiest and most inaccessible peaks, where these birds build their eyries, and whence they survey the land with that strange air of watchfulness which distinguishes birds of prey. The beasts that live by rapine, especially the *Felidæ*, naturally assume attitudes of repose, and are essentially lazy, with a graceful indolence; but the birds of the *Raptores* group are ever on the lookout, ever piercing the distance with their bright, sun-defying eyes. And the natural blind that Providence has given to their eyes is of all places necessary here; for the glare of the noonday sun, falling upon these peaks of snowy limestone that rear themselves upward for three thousand feet like a huge ice-wall, without the relief of a single break, is positively blinding. There are no shadows, save where here and there a haughty crag overtops its fellows, and mounts up in the semblance of tower or Gothic spire of Giantland. Here, from the dazzling white, the shadows are a determined blue, and one might think one's self in Alpine countries, or among the everlasting snow-peaks of the Sierra. The eye turns, with a sense of exquisite relief, to the wooded crest below, where the sugar-pines stand in glorious phalanxes. These trees grow to an immense height, often not less than three hundred feet, though their diameter is only eight. This gives them an appearance of slenderness and grace resembling the effect produced by Saracenic columns; an effect heightened to the utmost pitch of idealism by the character of the trees. For fully one hundred and fifty feet these lovely trunks are branchless, and as symmetrically rounded as even a Neo-Greekish architect could desire. The hue is a bluish purple, delicately marked with a net-work of scorings. From the point where the branches commence, they stretch out with nearly level poise straight from the shaft, and their leaves are dark-green spiculæ, to which the noonday sun gives a yellow tinting. Lying down at the bases of these regal pines and gazing upward, one sees the foliage massed with fairy-like grace against the white walls of the limestone, and above these three thousand feet of blinding glare is the sky, like blue fire, into whose depths the eye seems to pierce. But the sugar-pines are not alone. Often they are mixed with firs of feathery, bluish-green foliage, hiding by its mass the dark-brown trunks. And then, more rarely, is found the big tree, *par excellence*, the *Sequoia gigantea*. These, however, are aristocratic, and are generally to be met with in open glades, green with herbage, and bright with the blossoms of many flowers. Some have a circumference at the base of one hundred and thirty feet, and rise to an altitude of three hundred feet. The bark is excessively thick, scored with deep, regular grooves,

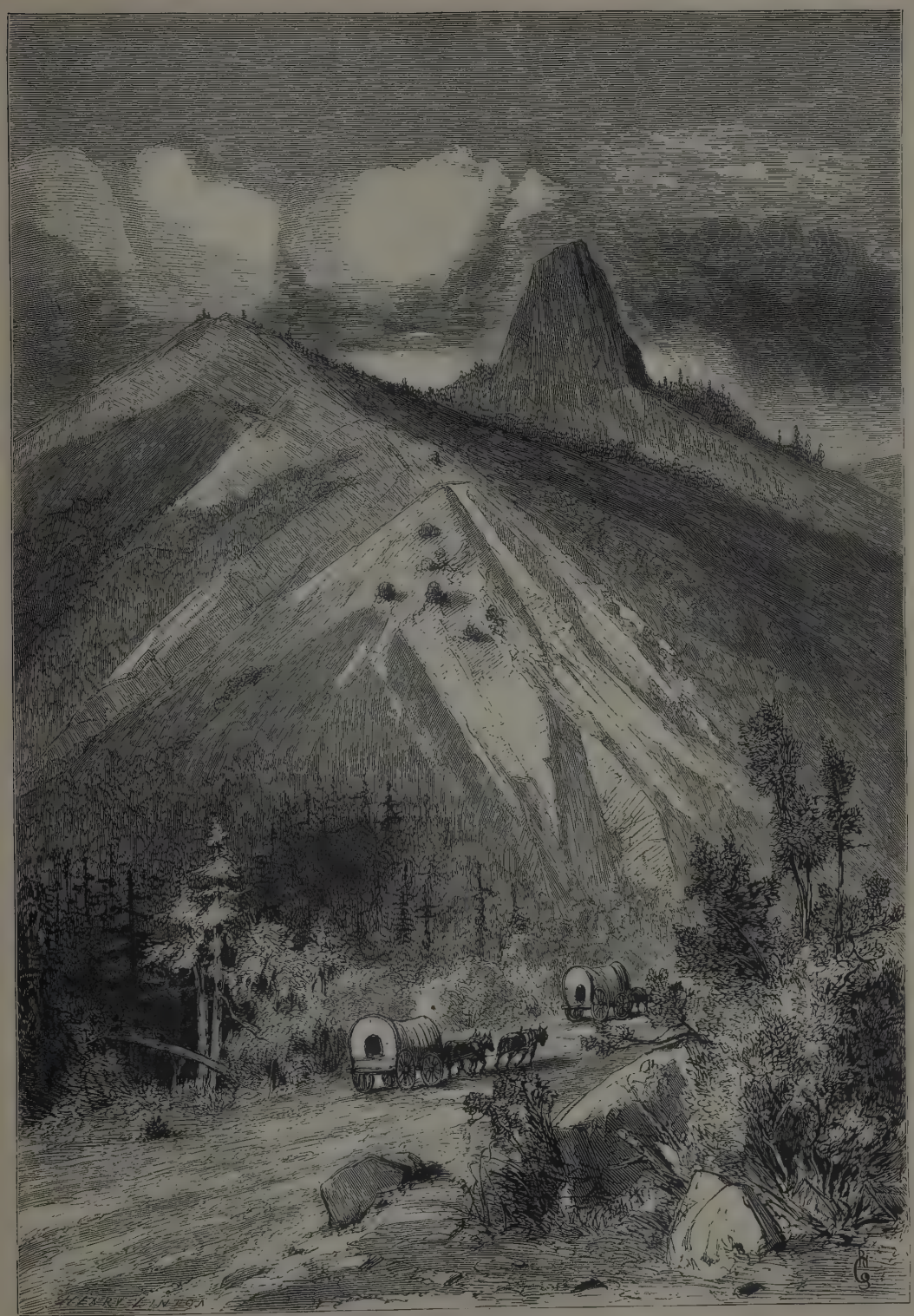


LIMESTONE FORMATION, ON PITT RIVER.

and of bright-brown color, mottled with purple and yellow. The foliage of these huge trees is delicate beyond description, and has been aptly compared to a pale mist of apple-green hue. Old, very old, are these trees, and many things have they seen, and many secrets do their Hamadryads keep. Many of the sugar-pines are a thousand years in being, and the giant *sequoias* more than double that tremendous age.

Though the granite and limestone hills extend with unbroken grandeur along the line of the Pitt River, the pine-grown crest is broken here and there where the valley broadens, and from the opposite bank the land stretches out into breadths of prairie. Here the Indians, known by the name of the river, are mostly to be found, encamped in great numbers on the plain, which is covered by a long, rank, tangled grass, almost overtopping the traveller's head. There are not wanting trees, for manzanitas and sugar-maples grow in clumps upon the plain; and on the opposing slopes, wherever the lime-stone is not too precipitous, there are dense, serried ranks of firs, and occasionally in the ravines a stunted growth of cotton-wood. And, wherever there are foot-hills, the oaks abound, displaying their far-reaching branches and their lustrous leaves. The river is quite rapid, but neither broad nor deep. It abounds in salmon, which are so thick as to shoulder each other, as the Irishman said. This accounts for the presence of the Indians, who secure the fish by spearing. With the habitual wastefulness of their race, they will only take the salmon that are in the highest condition, and, when a fish has been brought to the surface struggling on the cruel barbs of the spear, with his silvery sides flashing in the sunlight, if he does not please the fastidious "buck," he is instantly rejected, and committed in a dying condition to the water. High over head, wherever an Indian spears, will be found soaring a bald-headed eagle, too lazy to fish for himself, and having no osprey to rob here. As soon as the rejected salmon is seen floating down the swift current, the eagle descends like a falling-star, and, seizing the hapless victim in his strong talons, bears him away to his castellated eyry.

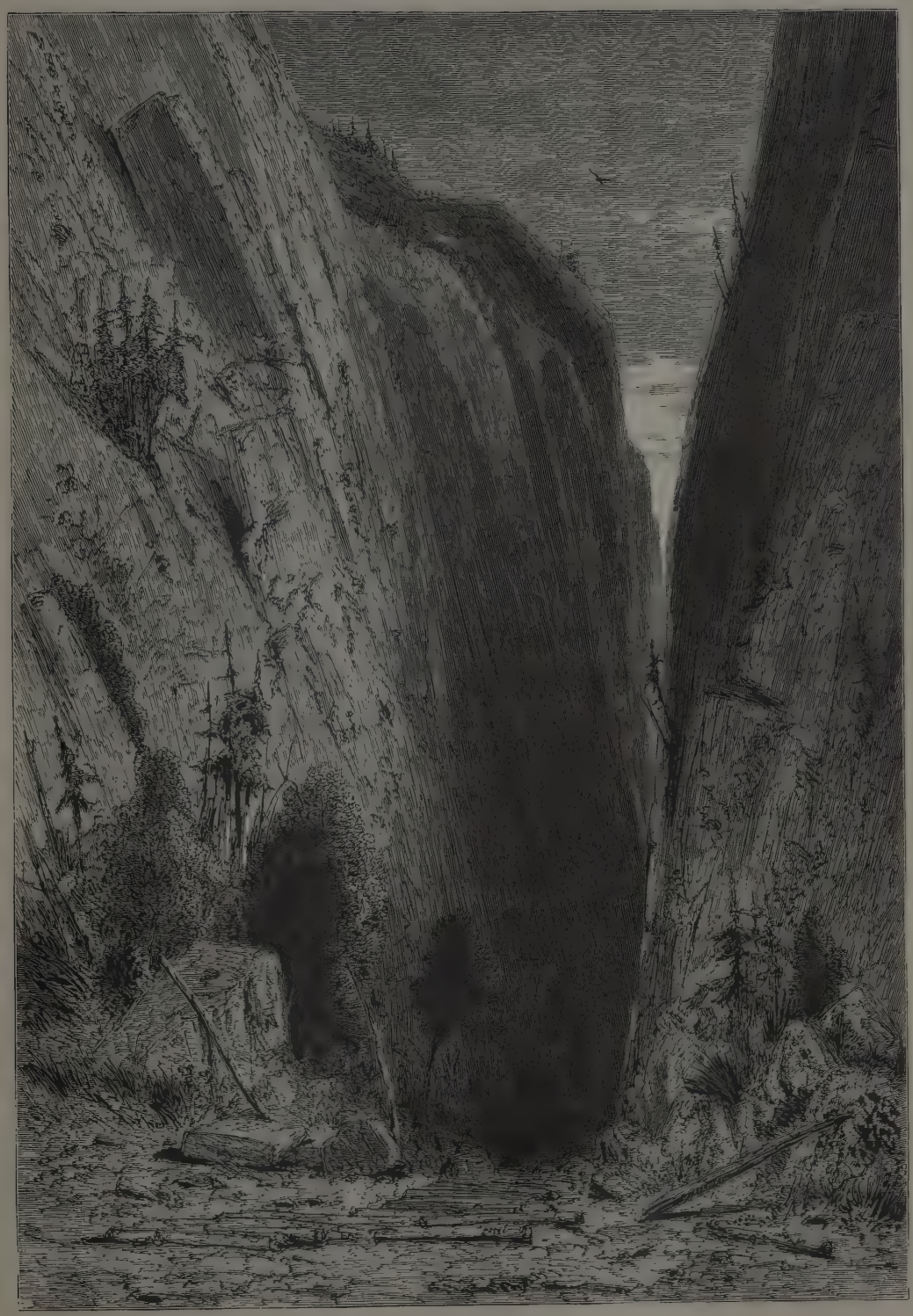
The region of the Pitt River, or, as it is termed by the map-makers, the Upper Sacramento, is an absolute wilderness. Lake and field and fell, naked crag and towering pine-clad crest, succeed each other with a savage grandeur similar to, but far greater than, that of the wilderness of the Adirondacks. To the south and east are the iron-hills, enfolding in their rocky clasp millions of treasure, that will be brought out by the future generations. At present the Indians give much trouble to the authorities, and are continually making combinations with the northern tribes, those of the Modoec and Rogue Rivers. Their camps are somewhat picturesque in their general aspect, and when viewed from a distance; but a nearer look destroys the charm. In front of each hut will be found a squaw of preternatural ugliness, curing the salmon by splitting it, and drying the pieces in rows upon light scaffoldings of wicker-work. These are subsequently smoked over low fires of fragrant fir. Each squaw is expected to attend to this business, and to perform her maternal duties; and the papoose, stiffened in a mummy-like roll, is



PILOT KNOB.

slung handily at her back, and slipped round to the breast whenever hungry. These babies never cry, but stare at the stranger with weird, black, beady eyes, and with absurd gravity.

From the valley of the Pitt the traveller rises, continually traversing woods covered with fair mountain-pines, until, through a notch to the northward, a glimpse can be caught of the huge summit of Shasta, which we illustrate by a steel-plate engraving. The tents are generally pitched at Sissons, which is surrounded by a cluster of ranches embowered in vineyards and orchards, that are trebly inviting to the eye after the weary tramp through the wilderness. The ground, where not cultivated, gives only a thin sward of grass, with tufts of the bitter-sage. Rising from the plain are hundreds of small volcanic hills, built up out of the lava, the mud, and *scoriæ*, thrown out from the crater above in other times. Beyond, there is what may be termed the base of the mountain, attaining an altitude of some two thousand feet, and throwing out spurs in every direction. Above this the cone of the mountain rises in one tremendous sweep to a sheer height of eleven thousand feet. The stupendous proportions of this great snow-peak would alone be sufficient to rivet the attention of every traveller. But to these must be added a most wonderful play of color. The lava forming the body of the mountain, which penetrates often through the snow-part, is of a pale rosy hue, and, when the sun shines on this, it has a splendor which words are too weak to render adequately. The snow, with its pure, white, fleecy fields, is in many places diversified by great glaciers of ice and yawning crevasses, in whose depths are shadows of the most intense blue. Upon the veins of the ice the sunbeams fall with refracted glory, giving forth the most wonderful opalescent tints. Here, in some places, the hues are green as emerald; there, in others, there is a lurid purple, interstriated with a tender pink. In other spots, the prevailing tone is a rich cream-color, perfectly translucent. The snow, too, has its colors, but generally glows with an incandescent fire under the welcoming kisses of the solar rays. So beautiful, so varied, are the effects produced by the mingling colors of lava, of snow, and of ice-enamelling, that, for days, the beholder cannot consider other things. His eyes are ever strained upon the peak, and bent admiringly upon its lustrous hues and the deep, violet shadows that contrast them. He has but one thought—to watch the radiation of color at sunrisings and settings, and see the fiery rays slant and shoot across the great mass, working its parts up from the still white and steely gray of night to all the splendors of the northern lights. Sometimes, when the sun is at its greatest height, a thin, fleecy veil of vapor steals from the round rim of the topmost crater, and one cannot but feel a sudden contraction of the heart as the thought flashes upon the mind that Shasta is still active, and that that light, transparent cloudlet is smoke issuing from its inmost secrets. The imagination and the memory combine to tell how this might be, how volcanoes in Europe, notably Vesuvius, slept calmly, as if extinct and dead, for more than a thousand years, and then woke up to hurl death and destruction for leagues around.



UMPQUA CANON.

But, whether Shasta is dead in reality or only sleeping, it is certain that the vapor is not smoke, but is water collected in the crater at a sufficient depth to preserve it from congelation, which the sun's ardor has released in the form of cloud. It is pleasant to watch it wreathing softly around the royal giant's head, and to note the conduct of the stratus-clouds that, far below, come in contact with his breast. They sweep on, gliding gently in fair, straight lines, but, as soon as they touch him, begin to break up softly, and, having done their best to girdle him, are either converted into glittering snow-flakes, and lie softly upon his bosom, or appear as cirri, and float away into the upper air.

When the eye has been satiated with the radiant colors of Shasta, the mind begins to be impressed with its vast proportions. Its total elevation above the sea-line is fourteen thousand four hundred and forty feet, nearly the same height as Mont Blanc, the monarch of European mountains. But Mont Blanc is broken into a succession of peaks, which the eye cannot take in at the same time, except from such a distance as to dwarf the grand effect. Not so with Shasta. Standing in front of Sissons, the eye is permitted to take the whole at one glance. There was no cumulative series of effects of Nature in building up this mountain, for it is a gigantic peak set simply upon a broad base that sweeps out far and wide in every direction. From the base the cone rises upward in one tremendous sweep of lava and ice. Very sheer and precipitous is it to the north and south, but east and west there are two grand slopes, from the plain right up to the rim of the crater. These are the buttresses of Nature's great chimney. One of these, being free from impediments of crevasses and glaciers, is generally chosen by travellers who wish to make the ascent, which is not difficult. This is in the direction of Strawberry Valley, a charming place, rightly named, belonging to a gentleman whose peaches are yearly reckoned by the thousand bushels, and his grapes by the ton. He has built an excellent turnpike-road outside of the valley, on which the toll is by no means light. From the tower-house, the view of the great Shasta is very pleasing, because one loses sight of the vulgar little mud-hills which, from Sissons, insist on adorning the foreground, and one gets a noble idea of the glorious girdle of forest which clothes the base. Beyond a well-defined line the ascent toils upward without a tree or shrub to cheer it on the way, retaining nothing save a little stunted herbage. This is soon replaced by the pale, roseate lava, and above that comes the deep blue of the snow in shadow. The road winds through Strawberry Valley, over a soil entirely of pumice-stone; and it is odd to see great sugar-pines, whose roots are firmly embedded in masses of this substance. Around Shasta this tree produces its most enormous cones, some of them being fully eighteen inches in length.

The road passes, on its left, Black Butte, another extinct volcano of considerable size, which appears dimly in the far distance. After leaving behind Lower Klamath Lake, in a couple of days one sees rising in the blue air the singular form of Pilot Knob, an elevation of the Siskiyou Mountains which, becoming a landmark to

THE THREE SISTERS.

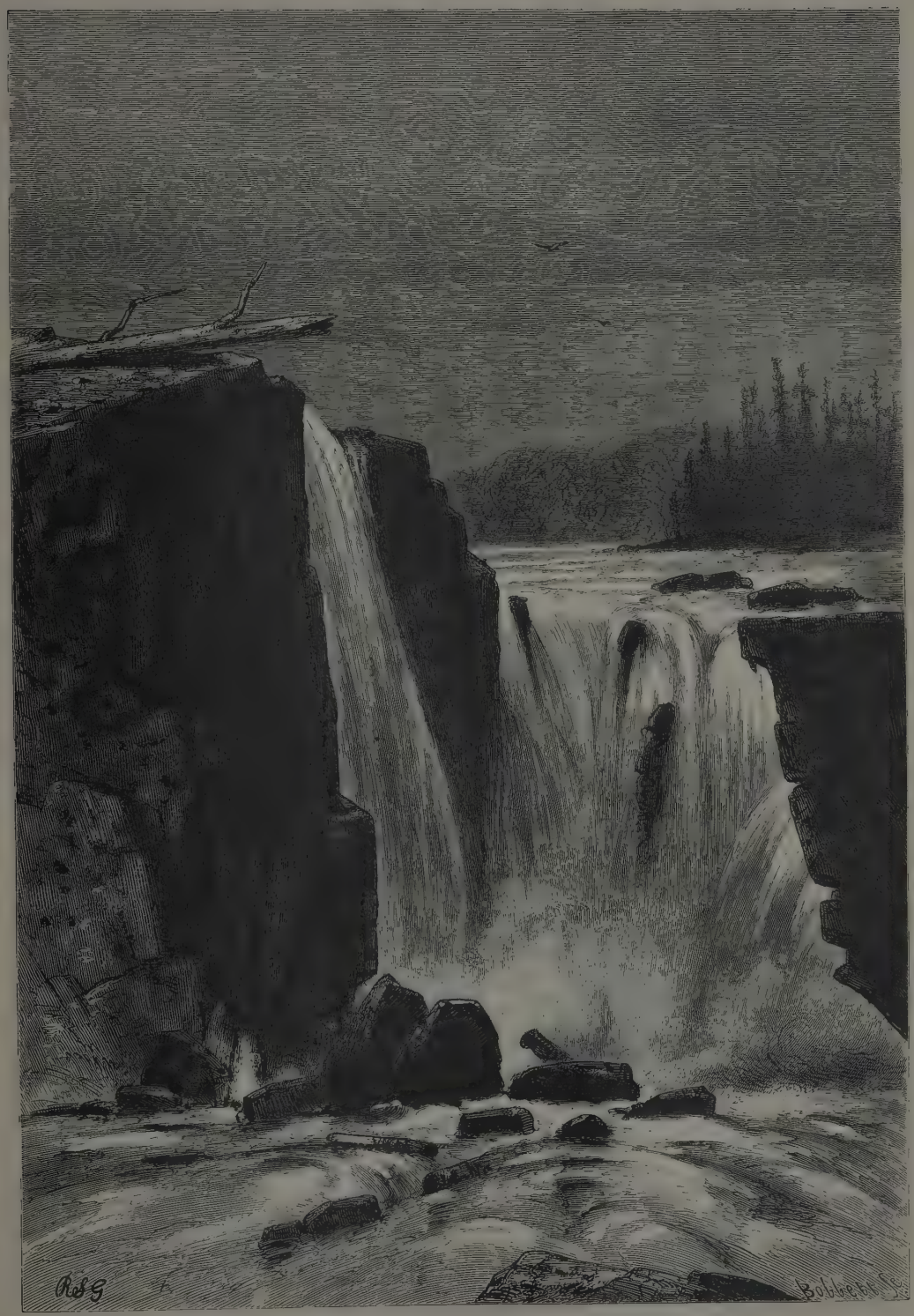
immigrants journeying to Oregon, has attained its name. This rock is a great mass of black volcanic substance, which rises perpendicularly from the mountain-crest. The Siskiyou Range has here an elevation of twenty-five hundred feet, and the knob is about five hundred feet higher; but its singularity has led to great exaggeration, and many travellers have spoken of it as eighteen hundred feet high, and of the Siskiyou Mountains as next to Shasta in importance. This is simply ridiculous. The aspect of the pass is not very prepossessing. The volcanic origin of the mountains all through this region accounts for their singular lack of beauty. The angles are so sharp that the earth which covers their skeletons cannot adhere, and comes off in great land-slides, leaving the mountain-sides bare and exposed. But the trees which skirt the base of the hills are very beautiful. Every step toward Oregon from this point seems to increase the size of the forests. The trees grow thicker together, and the firs and pines are larger. There are also birches, balsams, ashes, spruces, and other trees of northern climates, and it must be noted that the number and size of the firs is continually increasing, until they predominate over the pines. There is no lack of oaks, too, through these valleys, and the wagon-trail often winds through groves that are park-like in the beauty of their natural arrangement; for there is this singularity about the oaks of this region, that they grow in groups or clumps, with just such distance between them as permits the fullest development of each individual, and yet preserves them in masses of the highest beauty. No landscape-gardener has completed his education who has not studied the oaks of Northern California. The mistletoe is found here also in immense quantities, and one sees occasionally trees that have perished from its embrace. But this appears to be only when the tree from some other cause had received a shock to its vitality. Healthy trees do not suffer from the clasp of the parasite, and one observes continually oaks whose lower trunks are one mass of mistletoe, without any injury or loss of strength.

Beyond Pilot Knob the immigrant-trail crosses the Rogue River, a beautiful stream, full of salmon, but the country here is infested with quarrelsome Indians, who are continually committing depredations on the settlers and upon travellers. One of the branches of the Rogue River is ominously named Grave Creek, from the number of people killed by Indians and buried on its banks. Having crossed this pleasant stream, the road enters the Umpqua Mountains, and is soon involved in the terrors and the gloom of the Umpqua Cañon. This is a pass through the mountains, eleven miles in length, with sides twenty-five hundred feet in height. So high are these tremendous walls that it is with difficulty one can discern the blue sky. The wagons go along at the base like tiny insects, and the mules seem to be sensitive to the melancholy character of the place. The road is corduroyed in a very detestable fashion, and the poor beasts keep slipping all the way. Listen attentively, and you will hear a feeble trickling below the road, which, the walls reëchoing, swell into a low murmur. This is the Umpqua River, a narrow thread of water, which, in the summer and the fall, hides itself under the vege-

FALLS OF THE WILLAMETTE.

tation of the pass, and steals away unknown and unnoticed. But, in the winter and spring, it is a different stream altogether. Then, flushed with rains and with melting snows and ice, it becomes a dangerous torrent, occupying the whole width of the cañon, and sweeping away every thing that obstructs its course. Many a tale is told by settlers of immigrant-parties who have met death in this cañon from the furious waters of the Umpqua. Sometimes, in the late spring, it has been simply a thread of silver water, fed by incessant percolations from the overhanging walls. A rain-storm, bursting on the mountain-tops miles away, will swell it to an immense volume of water; and suddenly, as the wearied teams of the immigrants plod patiently on, and the poor strangers look in terror at the brown prison-walls that hem them in, they see, at a turn of the road, the river foaming with furious rage, and sweeping down upon them, intent on their destruction. Then rise upon the stifling cañon-air the wild shrieks of women, the fierce oaths of men, and the hoarse baying of hounds. Swept down by the irresistible force of the water—battered against the rocks and bowlders in the path—swept and crushed against its walls—the bodies float unresistingly here and there, until the waters, subsiding as rapidly as they had risen, leave a few whitening bones to tell the story of their fate to the next travellers through the ill-omened pass. Nor is this all. To these horrors must be added the ambuscades of the Rogue Indians, who, tracking a doomed caravan, will send parties into the cañon before them, and will follow after with others. Then, in some spot made terrible by graves ornamented with little wooden crosses, they will fall upon the wagoners, scalp them, and spoil their goods, bearing the women and the children away as captives. The sight of the settlement of Roseburg is one of the pleasantest that can be imagined to the travellers emerging from the cañon.

And here the troubles of the journey may be said to cease, and the beauties of the scenery can be admired with a full heart, without any terror of Indians or fear of dangerous rivers. The traveller is now in Oregon, and in the valley between the Coast Range of mountains on the west and the Cascade Range on the east. Striking the forks of the Mackenzie River near Eugene City, the snow-clad summits of the Three Sisters loom up into the pleasant air. They rise from a range of volcanic hills, of moderate height, to a considerable elevation, being capped with perpetual snows. They are nearly equal in size, and all have an exact pyramidal form, as seen from the road. The Mackenzie River flows along the edge of the plain; and, from the eastern side, bluffs of basalt rise perpendicularly to a great height. From the peculiar form of basalt, these rocks look like cyclopean masonry, being divided into huge blocks, with wonderful exactitude. The prevailing color is a dark, deep brown, varied by yellow. The summits of these bluffs spread out into a fair table-land, reaching, by a fine, gradual ascent, to the base of the mountain-range. These plains are covered with a thick, juicy herbage, much relished by the Indians' ponies, which feed here in great numbers. The tents of their masters are a conspicuous feature in the landscape. The sides of the Three Sisters are



SOUTHERN SIDE OF WILLAMETTE FALLS.

finely zoned with a broad belt of forest, which mounts to an altitude of six thousand feet. Great sugar-pines and silver-firs rise high above the other trees, and mass their dark-green foliage against the mountain-sides. Above these are broad fields of fair, untrodden snow. The angles of the Sisters are less acute than those of other snow-mountains in this region, and consequently there are fewer slides, and the peaks are always covered with the glistening folds. Very pure and virginal is the effect of these cones of clear white, unbroken by any sharp edges of volcanic tufas rising majestically from the lines of serried trees below. The clouds rest continually upon the peaks, adding their contributions of vapor, to be turned into tiny snow-flakes; and of mornings, ofttimes, the haze wraps them round in mazy folds, producing vague, fantastic images. Also, when there are rain-storms in the air, and clouds of heavy vapor ride through the upper world, they are attracted by the bold outlines of the peaks, and, settling on them, are changed into varied forms; sometimes appearing like a knight's helmet, with crest and feather backward streaming from the shock of tourney; sometimes wreathing and twisting like volumes of smoke from a great conflagration; sometimes pushing out circular cloudlets, like the bubbles of a mill-race. The Indians believe that these three peaks were three female giants, who had been wives of Manitou, and, having rebelled against him, were turned into stone. The banks of the Mackenzie have often furnished themes for the admiration of the poet, and fertile subjects for the pencil of the artist. The great columnar masses of basalt—suggestive of the glories of Staffa and Iona—come sheer down to the water's edge, and the brown and yellow colors are reflected on the surface of the stream. Indians, regardless of Nature's beauties, are intent on spearing salmon; while the Indian boys, with bows and arrows, hover about for a shot at the enormous hares which abound here, and feed on the juicy herbage of the high level and on the shoots of the manzanita—a tree which something resembles the laurel. The sugar-maple makes its appearance here in considerable quantities; and the silver-fir displays its cones of grayish green. These stand up in the form of a cup, and have, perchance, been used as such by the gambolling squirrels. On the plains level with the river the grass is coarse and rank, and the soil appears in patches of bare sand. The rock crops up, also, in bowlder-like forms, which, combined with the poor grass, gives a barren, hungry appearance to the country. This, however, is not a true indication, for the hand of industry is rewarded plenteously for its efforts. Apples grow abundantly wherever orchards are planted; and it is said to be simply the finest country in the world for wheat. It is upon the line of the proposed railroad, and in a few years the Three Sisters will give back from their white walls shrill echoes of the steam-engine's scream.

Not far from them, in the same range, rises the Willamette River, on which Portland, the chief city of the State, is situated. The falls of this stream are justly celebrated for their beauty. The river, which is generally about a mile wide, narrows sud-

denly near Oregon City, as if preparing for its tremendous leap. The rocks on each side are of frowning basalt, of a deep black, rendered more intense by the foaming waters. By the action of the stream—the current being strongest in the centre—the falls have been worn into a horseshoe form, the two sides being so close that one can throw a stone to the other shore. The water, rushing with a very swift current precipitates itself down a sheer fall of seventy feet, rising, in smoke-like mist, from the mysterious depths below, where it issues in great swaths of turbid water, streaked with green, and curved like glass, jostling with the bowlders of basalt, and roaring in rage at the contest. The river has not very much water at any time; and the steamers on it are all of the stern-wheel order, which captains declare can be made to float on a heavy dew! Hence, most of the splendor of the falls is lost by reason of the great basalt cliffs, showing too plainly amid the boiling waters. The rocks in themselves are grand; the fall is prodigious; but it is seldom that there is water enough to get a really fine effect. From this cause travellers, who survey the falls in comfort from their hotel-windows in Oregon City, are very often disappointed, and apt to accuse the Oregonians of taking geese for swans. But those who wish to see the falls in their most glorious aspect, will do well to descend the river, and gaze upward from the south. Then, when below the falls, the tremendous proportions of the scenery forcibly impress the mind. The huge walls of basalt, built up in enormous blocks of masonry, quarried by Nature's own subtle and strong hand, excite the liveliest feelings of admiration. The two sides approach like giants determined to stay the progress of this turbulent Willamette, and drive him back to his sources in the far-off Cascade Range. The river, on the other hand, foreseeing the opposition of his rocky foes, draws all his water to the centre, and, contracting his flanks, makes one tremendous charge, and bursts his way through the opposing walls. Down, down, into the sheer depths below, where all is foam and mist and noise and mystery, plunges the river in great curves, that hurl themselves boldly into the air like so many Curtii plunging into the gulf. Masses of the basalt, broken and thrown down, show their black heads feebly in the centre through the rush of waters. But on one flank the wily enemy has gained a temporary advantage, and a great stream has been separated from the main flood. Yet to no end, for this divided portion precipitates itself in a fiercer, braver curve than the others, and joins its friends at the bottom of the maelstrom, amid a hoarse, congratulatory murmur, which mingles with the roar of the combat. There is not so much mist as in some less grand cataracts, but there is enough to hide the fortunes of the fallen river, and the confusions of its lines, as they beat against the masses of rock which they have detached through long successions of heroic charging. A poet might discern, in the midst of the steaming vapor, forms of fair Naiads and grotesque Nixes and Pixies; but the practic algray orbs of the Oregonians see only an unpleasant necessity for a portage, and for another steamer to Portland, twelve miles from the junction of this river with the grand Columbia.

NIAGARA.

WITH

ILLUSTRATIONS BY HARRY FENN.

NIAGARA! Who has not heard of this peerless cataract, which is among water-falls what the Himalayas are among mountain-ranges, not only the grandest, but so greatly preëminent as to be without rivalry? Every fresh discoverer of African cataracts does, indeed, gravely inform the public that the falls of the Makololo, or the Cham-

The Brink of the Horseshoe.

bezi, or the Wagogo, are, in his opinion, not inferior to the far-famed Niagara. But this is simply an ebullition of enthusiasm, due to personal feeling, and the indulgent reader regards with a smile a statement which it is alike impossible to verify or to controvert. The essential quality of Niagara is its sublimity. Other falls are dashed from more stupendous heights, and lost amid chasms of rocks of wilder and more savage formation. But none of them even approach this cataract in that first essential of magnificence. Nor can we be surprised at this when we consider that over the ledge of limestone at this point the accumulated waters of four vast inland seas hurl themselves madly on their way to the ocean, and that, during the last half-mile before the wild descent, there is a decline so great as to produce the most superb rapids. The territory that these lakes drain is equal to that of the entire Continent of Europe, many of the streams that feed Lake Superior being fully two thousand miles away. Hence the volume of water

precipitated is so enormous as to produce the most majestic effects, and it may well be doubted if Niagara would gain much by an increase in the height of the fall. At present the height is, on the American side, one hundred and fifty-four feet, and, on the Canadian, one hundred and forty-five feet. The reader can without difficulty recall to his mind many water-falls whose height exceeds this; but it often happens that the volume

Barnett's Stair, under Table Rock.

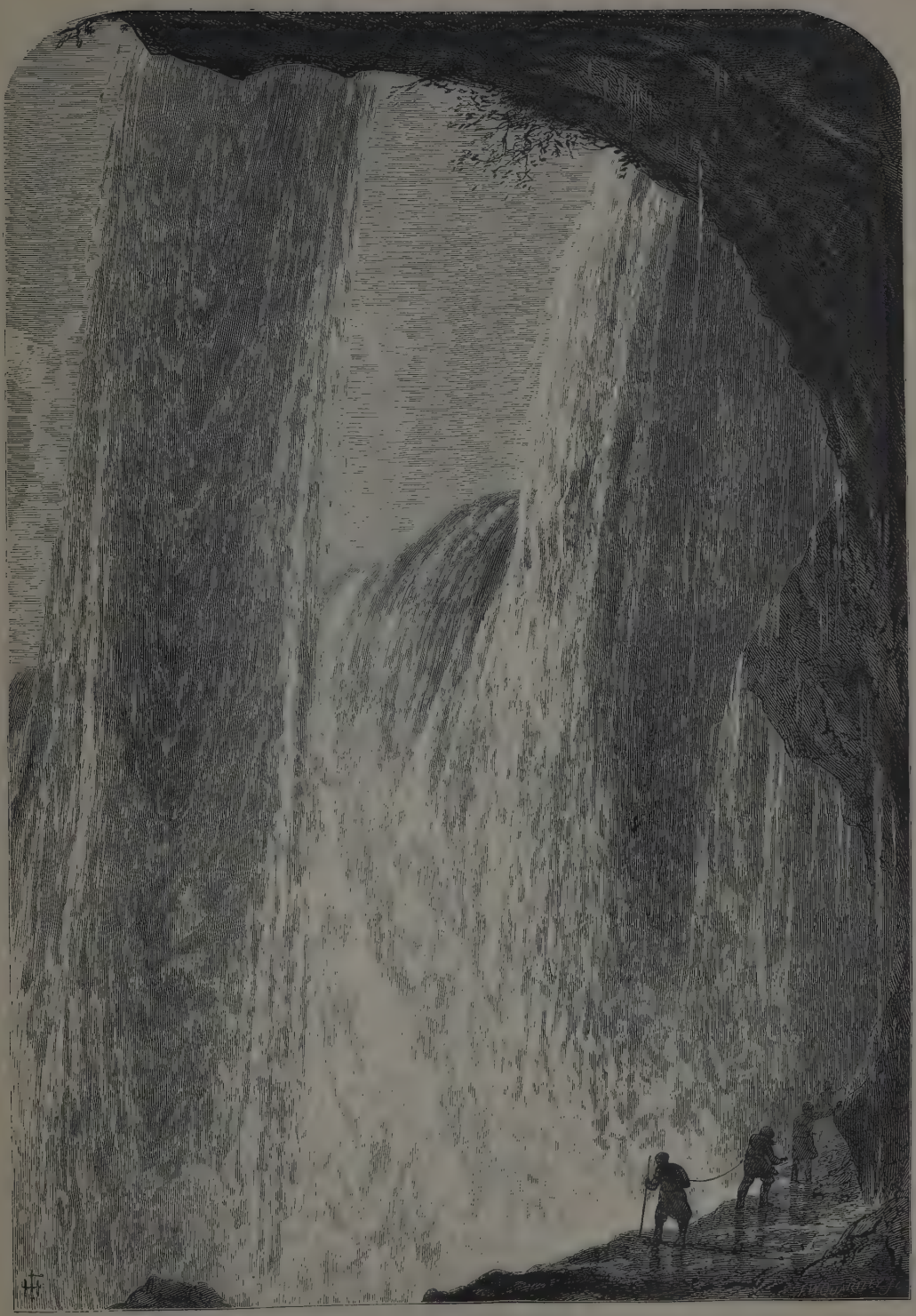
of water over such descents is very small, as is notably the case with the Bridal-veil Fall in the Yosemite Valley. That, however, has advantages of the most striking character in its surroundings. Niagara has nothing. All that it boasts of the sublime and the beautiful is contained within the rock-walls of its stupendous chasm. All its approaches are plain, dull, and tedious. The country around is almost absolutely flat, divided into fields that wave pleasantly with bearded grain, and dotted with white-

painted wooden houses, ugly churches, homely factories, and mills. There are no forests, and but few fine trees; and these are confined to the verge of the chasm, and have been planted there by people who mourned the poverty of the surroundings of the great fall, and desired to add something to the immediate effect. The villages that now crowd about its vicinity have no recommendations on the score of fine taste; and, though

Barnett's Stair, in Winter.

the numbers that resort hither from every land have made large hotels necessary, it has never been thought worth while to surround them with gardens, or to do aught that should remove the utilitarian look of the place. Niagara, it must be confessed, resembles a superb diamond set in lead. The stone is perfect, but the setting is lamentably vile and destitute of beauty. And, even in the chasm to which its glories are confined, there is but little loveliness or majesty in the configuration of the rocks, though they are deeply in-

teresting because the river has laid them bare from top to bottom, and exhibits their stratification as clearly as a geologic chart. First we find Niagara limestone, compact, hard, and full of geodes; next to this comes a soft, crumbling shale, argillo-calcareous in character; next comes a hard, gray limestone; then thin layers of greenish shale; then mottled sandstone; then layers of reddish shale and marl; then red, quartzose sandstone; and, lastly, red, shaly sandstone, intermixed with marl. And not only does Nature thus disclose the composition of the ground, but she enables us to see the work which has been done by the turbulent waters. We realize at once that two great feats have been performed through their agency—one the cutting of a channel from the head of Lake Erie to Lake Ontario, the other the retrogression of the falls from Lewiston to their present position. The method of operation of the former must be left to the opinions of geologists; but the latter is before our very eyes, and we cannot fail to comprehend it. There is no fact more undoubted than the first location of the falls at Lewiston, and of their gradual retirement by the eating away, year by year, of the rocky ledge over which the waters hurl their strength. The shale is so much softer than the other rocks, between whose strata it lies, that it is scooped out by the influences of moisture and frost with comparative ease. The result is, that the slabs of limestone and the masses of sandstone have, at length, their supports withdrawn from them, and are toppled down. The rate at which this work goes on varies considerably, according to the volume of the Niagara River and the severity of the winter's frost; but the average is considered, by scientific men, to be about one foot per annum. Those romantic persons, therefore, who have felt grieved at the inevitable fate of the cataract, may be comforted by the reflection that it required a period of thirty-six thousand nine hundred and sixty years to bring the falls from Lewiston to their present position; and it will take a much longer period to remove them back to the head of Lake Erie. And it is some comfort to reflect that, as nothing save a shifting of the poles or a sinking of Lake Erie can change the relative position of its bed to Lake Ontario, the falls must always be somewhere between the two. Also, in receding, the falls will gain considerably in height, as the slope of the rapids will then be added to the present fall. It is within the range of possibility that, when the cataract shall reach the source of the river, a new one may be formed at any point along its course. It is the opinion of Professor Agassiz that at one time there were three distinct water-falls in the thirty-four miles of the Niagara River. There is a cause which might produce another one. It has been suspected, on a comparison between the volume of water at the falls and that which is poured into Lake Ontario, that at least one-half of the accumulation of the upper lakes finds its way into Ontario by a subterranean channel. The Niagara, below the falls, has a mean depth of one hundred feet; below this, the bed of the river is filled up, for another hundred feet, with blocks of sandstone and slabs of limestone of enormous size, which have been detached from the rocks, and have sunk to the bottom. Those which have

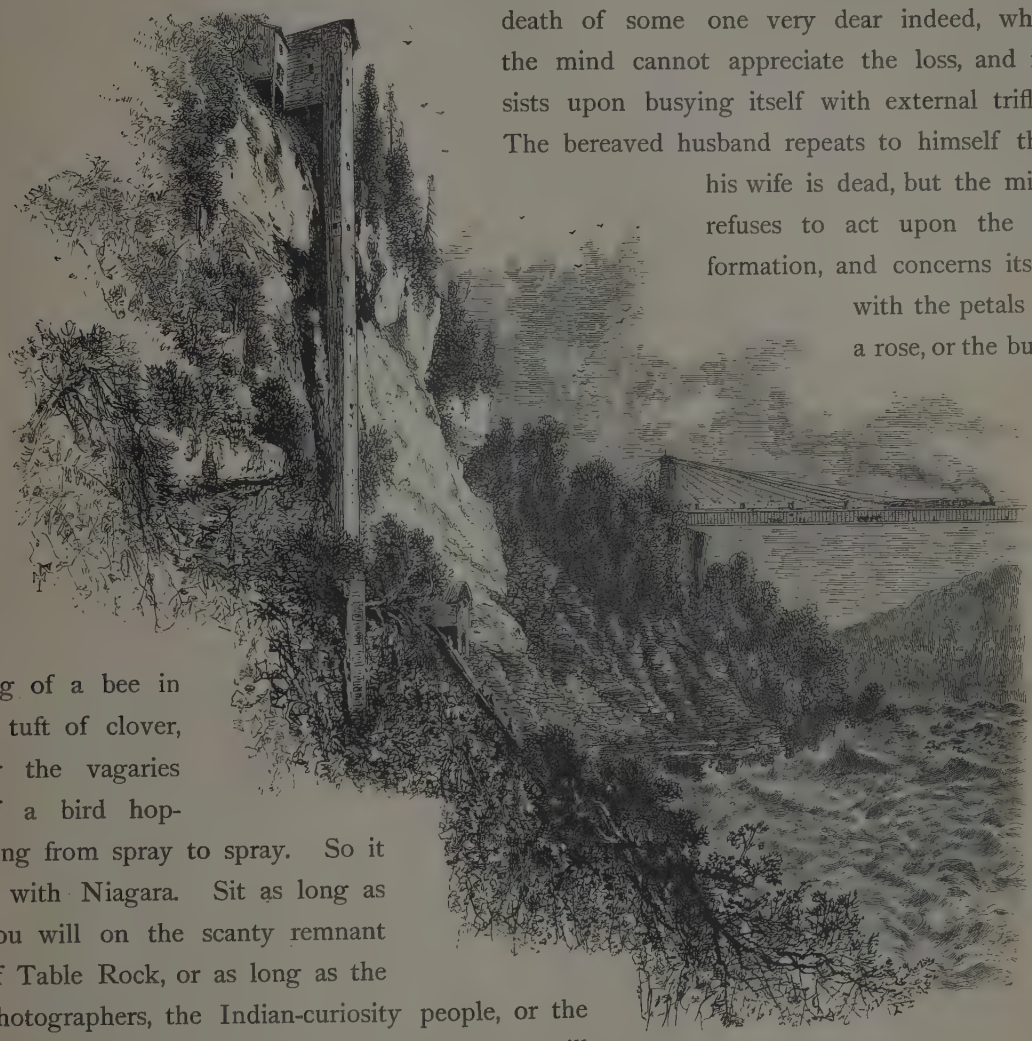


UNDER THE FALLS, CANADA SIDE.

been broken down by ice are, of course, ground to powder in the ice-gorges; but these form only a small part of the masses which are detached every year. The retrogression of the falls will necessarily make considerable changes in the channel, and thus will affect the subterranean river very materially, even to the extent of choking up its entrance. Then the rocky masses which form the false bed will begin to shift, and will be carried down to Ontario, producing such inequalities in the depth of the Niagara bed as may well cause another fall. These, however, are mere speculations, floating scum-like over the sea of science; but the retrogression of the falls is undoubted. The residents of the place have grappled this fact, however much they may disdain abstract science, and, knowing that the day must come when all their hotels and buildings, all their stairways, and their bridges and apparatus, will be useless, have determined to make hay while the sun shines. They unfortunately, while they appreciate the fact, seem to ignore the time during which these sad changes will be brought about; and they are as rapacious as if every present year was going to be the very last of Niagara, and had to be paid for accordingly. In no quarter of the world is the traveller fleeced as at these falls; he cannot take a single glance at any object of interest without having to pay dearly for it. Still there are few people who can afford to visit the place who do not go there; for man's impertinence and rapacity, though they poison the pleasure, cannot rob the scene of its awful sublimity.

The first discoverer of Niagara Falls quickly perceived that Table Rock, on the Canada side, was the best point of view for the ordinary spectator, though for the artist there are several other spots which bring into prominence various interesting features. It is so still, even after the fall of Table Rock itself, all that remains of that famous slab of limestone being a mere shelving rock. Here a rustic seat is arranged for the accommodation of visitors, who from this point can take in at one glance the whole of the falls. Immediately in front of them is the Horseshoe Fall, where, from the extreme depth of the channel, the water has a deep-emerald tinge of exquisite beauty. Next to it come shelving down the shores of Goat Island, with which, by bridges of frail aspect, on the right hand, is connected Terrapin Tower, and, on the left hand, Luna Island. Between Goat Island and Luna is a small fall, sometimes called Schlosser's. Beyond Luna Island stretches the American Fall. The whole width of the river here is four thousand five hundred feet, of which the American Fall occupies eleven hundred feet, Goat and Luna Islands fourteen hundred, and the remaining two thousand feet belong to the Horseshoe Fall. But it must be remembered that this measurement is from point to point; for, in reality, the curvilinear shape of the Horseshoe has a much more extensive line, probably double as much. These details one learns afterward, the first gaze of the visitor being too productive of the stupefaction of extreme awe to allow him to notice individual details. One sees the extraordinary volume of water, and its deep, rich color; one sees the clouds of smoke-like spray rising at the base; one hears

the roar of the cataract; and that is all. At the time being, nobody can estimate what is seen. The mind is stunned, and what the eye sees produces no effect upon the imagination. Afterward, when the mental powers have recovered their elasticity, the faculties of observation and of perception emerge from their lethargy, and act upon the discoveries of the eye. This peculiar condition of mind somewhat resembles the stunning effect of great grief caused by misfortune on the death of some one very dear indeed, when the mind cannot appreciate the loss, and insists upon busying itself with external trifles. The bereaved husband repeats to himself that his wife is dead, but the mind refuses to act upon the information, and concerns itself with the petals of a rose, or the buzzing of a bee in a tuft of clover, or the vagaries of a bird hopping from spray to spray. So it is with Niagara. Sit as long as you will on the scanty remnant of Table Rock, or as long as the photographers, the Indian-curiosity people, or the owners of side-shows in the neighborhood, will permit you, and, after all, you have not seized the idea of Niagara, and you will not be able for some time. Best is it, therefore, to glance from Table Rock last of all, and to examine first the details which the enterprise of individuals has placed within our power to study and observe. The great feat, of course, is to descend the stairs underneath the Table Rock from Barnett's, and to penetrate under the Horseshoe Falls as far as one's courage will permit. For this purpose we have to procure oil-skin suits, and caps like those worn in former times by coal-heavers,



Stairway at Whirlpool.

and known as fantails. The feet have also to be encased in India-rubber shoes, and, if the descent is made in winter, iron spurs are fastened underneath, so as to give us a firm footing on the ice and snow. The wooden stairways are narrow and steep, but perfectly safe; and a couple of minutes brings us to the bottom. Here we are in spray-land, indeed; for we have hardly begun to traverse the pathway of broken bits of shale when, with a mischievous swoop, the wind sends a baby cataract in our direction, and fairly inundates us. The mysterious gloom, with the thundering noises of the falling waters, impresses every one; but, as the pathway is broad, and the walking easy, new-comers are apt to think that there is nothing in it. The tall, stalwart negro who acts as guide listens with amusement to such comments, and confidently awaits a change in the tone of the scoffers. More and more arched do the rocks become as we proceed. The top part is of hard limestone, and the lower part of shale, which has been so battered away by the fury of the waters that there is an arched passage behind the entire Horseshoe Fall, which can easily be traversed, if the currents of air would let us pass. But, as we proceed, we begin to notice that it blows a trifle, and from every one of the thirty-two points of the compass. At first, however, we get them separately. A gust at a time inundates us with spray; but, the farther we march, the more unruly is the Prince of Air. First, like single spies, come his winds; but soon they advance like skirmishers; and at last, when a column of thin water falls across the path, they oppose a solid phalanx to our efforts. It is a point of honor to see who can go the farthest through these corridors of Æolus, where, in the lines of Virgil—

> "Una Eurusque Notusque ruunt, creberque procellis
> Africus."

It is on record that a man, with an herculean effort, once burst through the column of water, but was immediately thrown to the ground, and only rejoined his comrades by crawling face downward, and digging his hands into the loose shale of the pathway. Professor Tyndall has gone as far as mortal man, and he describes the buffeting of the air as indescribable, the effect being like actual blows with the fist.

As we return along the narrow path, we have leisure to examine the rock-wall, and to discern in it masses of white sulphur, mixed with limestone-lumps lying among the shale. We find also masses of pure, white quartz, sparkling like sugar, and pieces of selenite, or crystallized gypsum, which has a faint resemblance to asbestos, but is translucent. There are ferns growing in patches here and there, and a kind of water-cress, which, the negro says, is good to eat, but there is so little of it that it would take months to collect a dish. Of moss—long, fine, green moss—there is an abundance, and it grows so delicately that it forces screams of admiration and thrills of delight from the ladies of our party. When we remount the stairs, and find ourselves once more on the upper earth, we are divided in our minds whether to turn and examine the falls, which now begin to be

THE WHIRLPOOL.

comprehensible, or to doff our dripping over-suit and remove our drenched shoes. Romance and æstheticism suggest the former, but prudence thunders out that the latter is imperative, if we do not wish to catch a violent catarrh; so prudence carries it.

There are two things which can now be done—take a glance at the rapids above the Horseshoe Falls, from the Prince of Wales's Tower, or buy Indian curiosities. For those who are tired, the latter is no bad way of resting; but, for the strong-chested, strong-lunged visitors, the tower is decidedly preferable. We can walk comfortably here, while our friends are reposing; and we find ourselves side by side with a little streamlet which comes from the northward, and, though nameless and insignificant, has the honor of falling into the Niagara before it takes the great plunge, and uniting its tiny waters with the volume that pours forth its might in the tremendous curve of the cataract. We cross this streamlet by a pretty bridge, and linger for a few moments to observe the furious speed of the tiny rivulet, and how fully in harmony of feeling it is with the great stream beside it. Up the steps of the tower we go, and the guide kindly informs us that the structure was built in honor of the visit of the Prince of Wales, and was first ascended by him. When we arrive at the light-house-like summit, we cannot but admit the justness of thought of the gentleman who erected it. The view is, indeed, transcendent. Immediately below us is the river, which, from the position of the tower, we are forced to look up to rather than across, so that it appears like a raging, shoreless sea. To the left are Goat Island and the Three Sisters; midway, in the distance, the green slopes of the Grass Islands; and, beyond, the wooded bluffs of Navy Island complete the view. The rapids extend from the verge of the falls for half a mile; and so furious is the rapidity of the current that the centre is heaped up in a ridge-like form, and the waves on every side suddenly leap up in the air, like great fish, and fall down with a sullen sough. The wind comes sweeping over them, and drives their crests along the surface in showers of spray. Great logs and trees burdened with all the glory of their branches, with their greenery still untorn, come swooping down, taking leaps like greyhounds, and giving us the idea of independent life and motion. They terrify us, but we must follow them with our eyes. Here is a great hemlock, bearded with age, and with an abundant spread of branches. How he darts along, showing only portions of his length, like a great brown-and-green serpent! He nears us, he passes us; we turn —we must do it—and we see him, in an instant, shoot with tremendous speed over the brow of Niagara. Another and another still succeed; and, as we gaze, the instinct of cruelty arises in us, despite ourselves, and we long to see a bear or a deer driven down the rapids, and disappear over the abyss, uttering hoarse cries of fear and anguish.

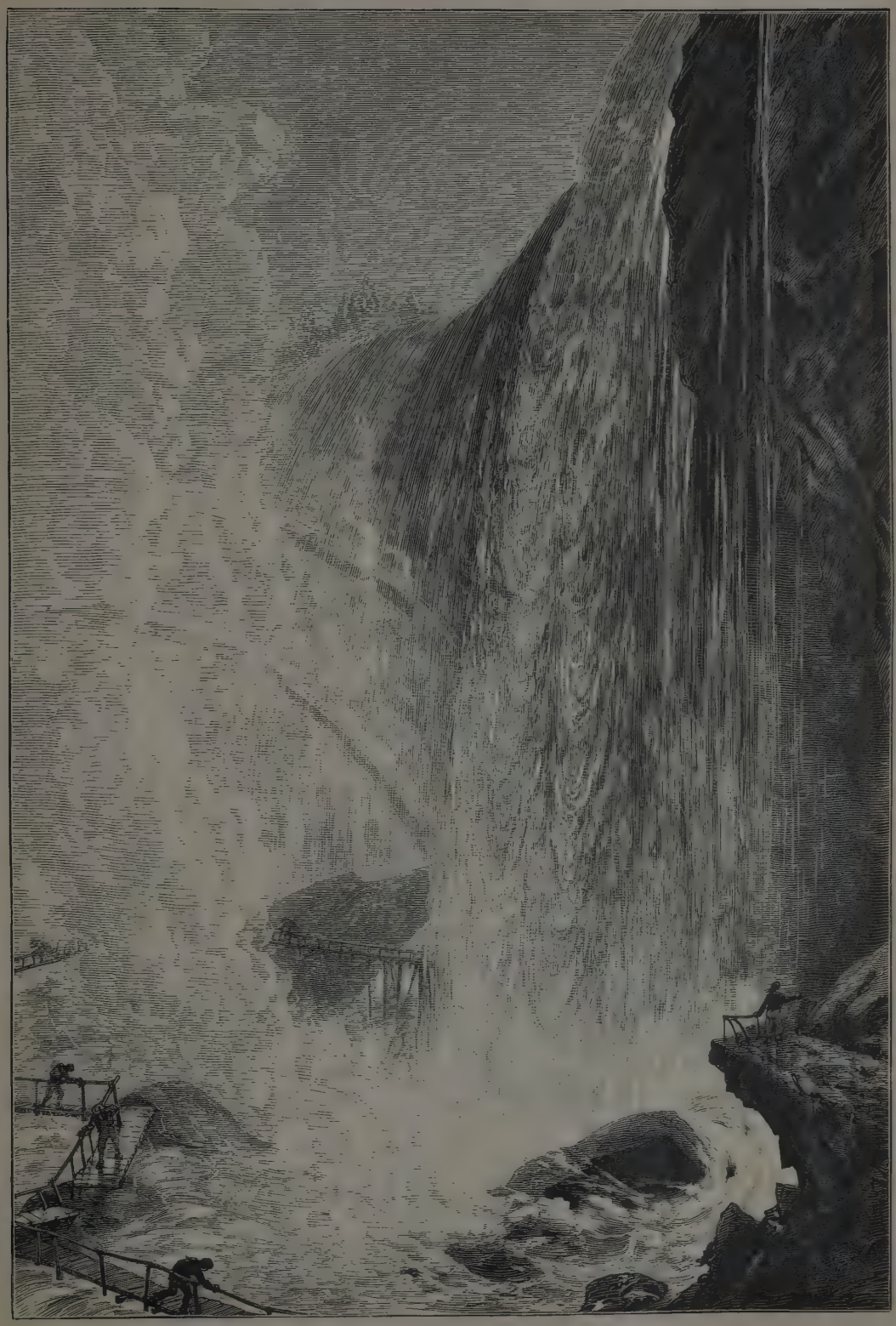
Coming back from the rapids, we learn, when we rejoin our companions, who are loaded with selenite ornaments and bark trifles, curiously ornamented with colored grasses, that the finest rapids are on the American side, and must be viewed from the bridge over from the main-land to Bath Island. The next point, however, on

the regular line of observation is the Whirlpool and its rapids. These are more than a mile below the falls, and the best point of observation is from the American side, and we have again to cross the Suspension Bridge, and to pass the lower bridge, which is justly considered one of the marvels of modern engineering. It was built in 1855, and it combines the advantages of the tubular form of construction and the principle of suspension. The carriage-way is level with the banks of the river at the edges of the chasm, and the railway-track is placed above this, on a level with the tops of the secondary banks. It is supported by two large cables on each side, one pair above the other, the lower pair being nearer together, horizontally, than the upper, so that a cross-section of the tube would be shaped somewhat like the key-stone of an arch. Each of these large cables is ten inches in diameter, and is composed of seven small strands. Each strand contains five hundred and twenty wires. Each wire

Rapids above American Fall.

was boiled for three hours in linseed-oil, so as to cover it with an oleaginous surface of considerable adhesive power. Each wire was carried across the river separately, from tower to tower, by a contrivance of the engineers, and then wound together, the strands being finally united into a cable. By this method the destructive power of the vibrations was reduced to the lowest possible pitch. Not far from this bridge is the elevator which leads down to the rapids.

The width of the chasm at the rapids, immediately above the Whirlpool, is only eight hundred feet—this contraction being caused by the compact, hard nature of the sandstone rocks through which the river here had to cut its way. The depth of the Niagara here must be very great, and the rapidity of the current, combining with the volume of the stream, actually heaps up the centre in a broken ridge, from which waves are perpetually forced into the air. The color of the flood here is a dull brown, and this is continued as far as the eye will reach, namely, beyond the Whirlpool, to the abrupt turn to the right which the river makes. The Whirlpool is not exactly a whirlpool. It is a vast and furious eddy, which, meeting with a very faint resistance from the shale and gravel of the hills at that precise point, cuts out, by its force, a huge, semicircular curve, and would, no doubt, have cut its way, but was suddenly arrested by hard rocks, which forced it to make a sudden turn to the right hand. There is an elevator here, the property of the De Veaux College, through whose handsome grounds the carriage of the visitors is driven, the toll for descending the wooden stairs going to support the institution. We traverse painfully the downward road, and find ourselves at the bottom, among huge masses of fragments, principally of gypsum, of a very hard character, whose edges, however, have been strangely and fantastically worn by the action of the water. These blocks are of all sizes, from slabs weighing many tons to pieces no larger than one's hand. Mingled with them are granite bowlders, whose pink hue makes them conspicuous among the gray gypsum. All are partially covered with a thick, velvety moss, of an intensely dark color. Seating ourselves on these rock-fragments, we discover that we are at the head of the Whirlpool, in the very fullest frenzy of its rushing fury. The chasm is still contracted here, and the rocks on the Canada side are sandstone, but on the American side limestone. There is on both sides a fine growth of deciduous trees, and the cedars come sloping daintily down to the line of broken rocks. The water fairly hisses as it undulates, seethes, and boils. The waves seem to have a life of their own, and to be animated with human passions. Here, at this exact point, comes the reaction of the eddy; and here one of a series of small whirlpools is formed, which suck down trees head-foremost in an instant, and vomit them out in a few minutes, with every vestige of branches and bark completely gone, and great splinters riven out of the hard wood. Even after this they do not escape, for they are borne into the semicircular eddy, and go wandering round and round for days together. The body of Francis Abbott, the hermit of Luna Island, was found here, but so mangled, so



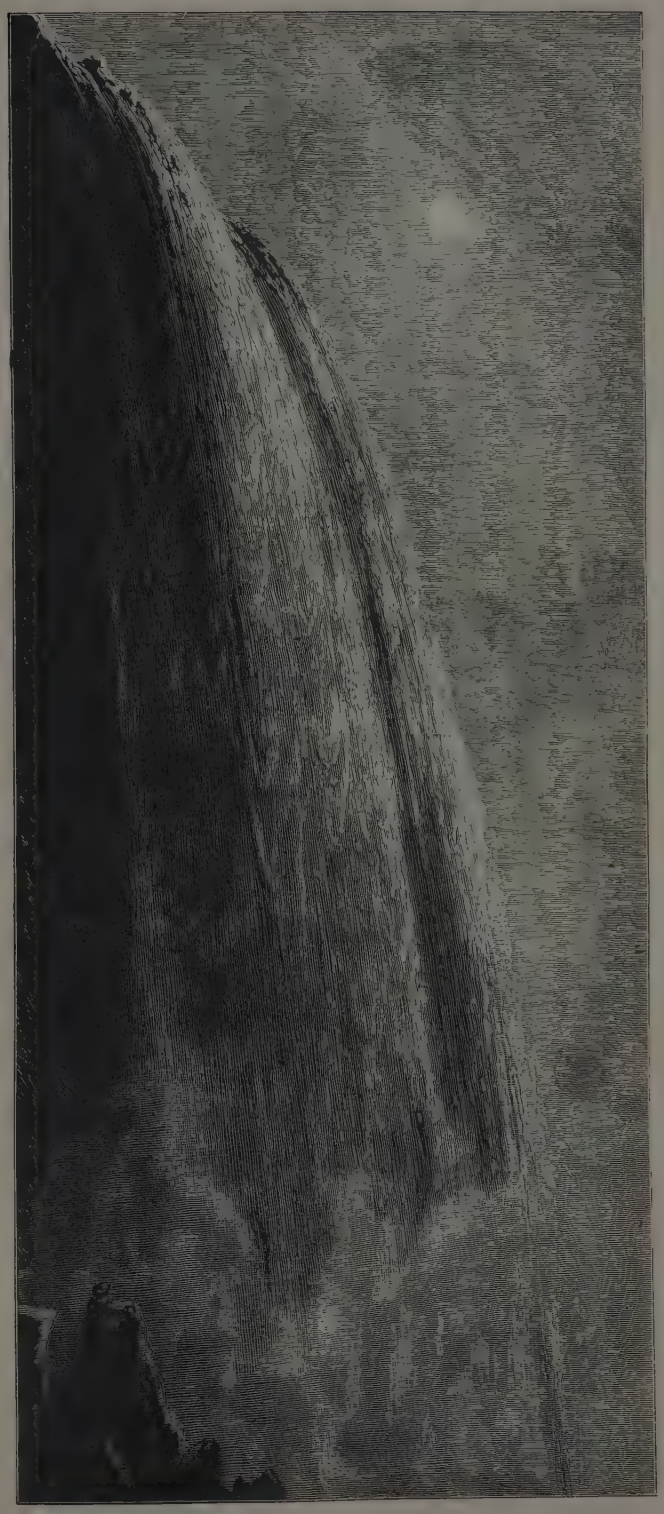
THE CAVE OF THE WINDS.

changed from what it had been, that the only being that recognized the piteous mass of tortured flesh was the poor victim's dog, which crawled to the horror that had once been a handsome face, and licked it with howls of anguish. He had been seized with the cramp when taking his accustomed morning bath; and, though his fate was known and his body was searched for, it was two days before this awful place would give up its dead. At the points where the whirlpools are, the scene is fairly terrific; the waters battle and rage and foam. Current opposes current, wave fights wave, with hideous uproar. Sometimes a wave is forced into the air by fierce collision with another from an opposing side, and is broken into masses of boiling foam, which the wind, as it comes bellowing down the gorge, drives in sheets of spray along the surface of the struggling eddies, and upon the cedars at the brink, which in winter-time become masses of icicles, and sparkle, when the sun falls on them, with a radiance greater than any chandelier of banquet-hall or ballroom.

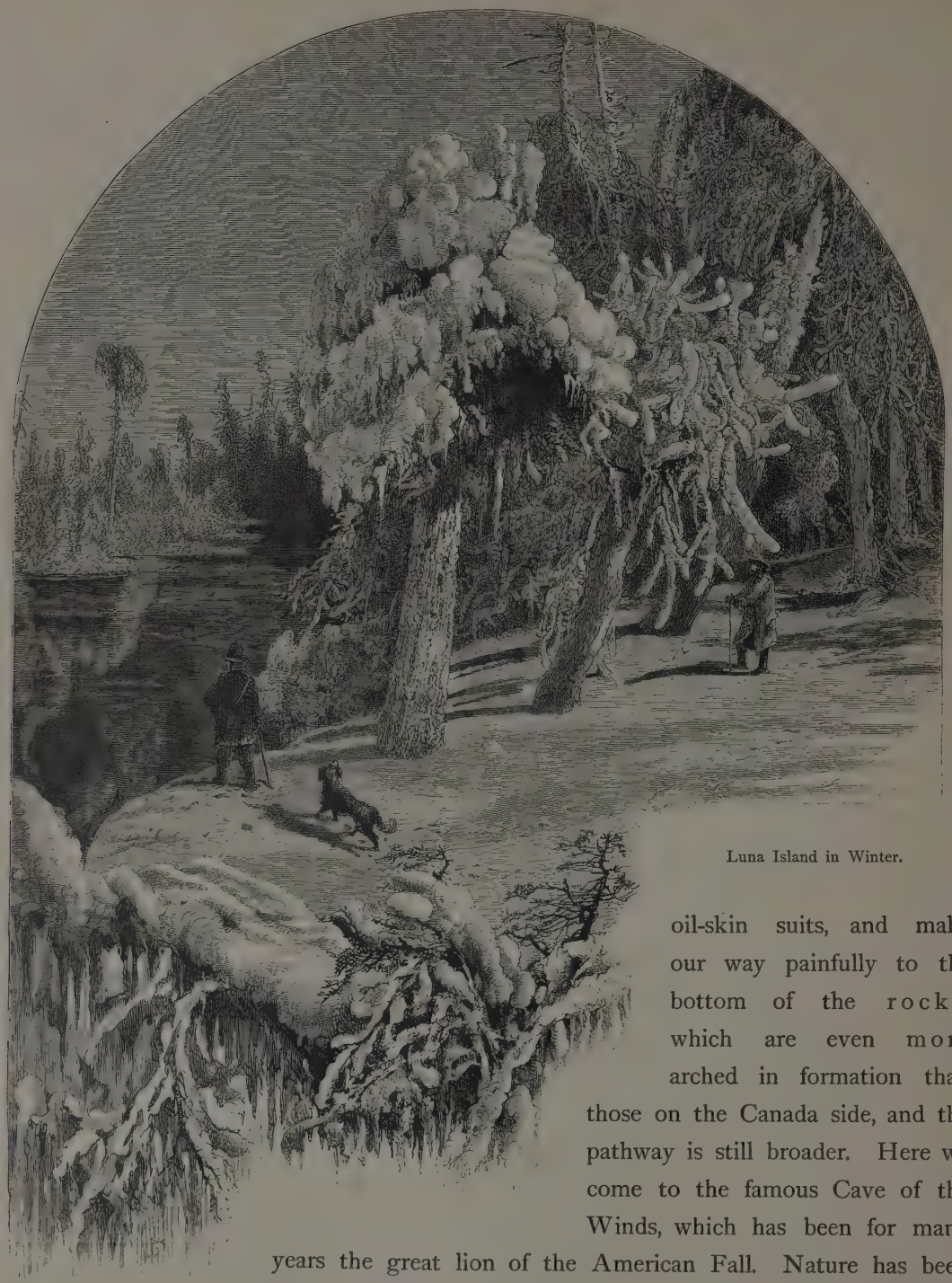
Ascending the elevator and regaining our carriage, we are now driven to the bridge above the Cataract House, which connects the American side with Bath Island, and thence again with Goat Island. From the first-named the view of the rapids, above the falls, is immeasurably finer than on the Canadian side, and this for two reasons: the first, because the point of observation is not much above the level of the rapids; whereas, from the Canada side, you see them from the great elevation of the Prince of Wales's Tower; and, secondly, because the water is contrasted at this point with numerous small islets, which are crowned with cedars, growing at every possible angle. These give an immense relief to the current, and exhibit its rapidity in the strongest possible manner. Where all is moving, the motion seems less fierce; but these stationary islets act as a foil. This is a good place to study the lines of waves, for the appearance of these rapids is exactly that of a tempestuous sea, whose billows are heaved and tossed in every direction, and yet, at the same time, are forced forward by an irresistible current. The time to visit this spot is at night, for then the moon, rising slowly in the heavens, sends its light through the very verge of the cataract, shining through the extreme edge. Rising higher, it casts its beams over the angry rapids, turning the dark waves into moving ebony, and the foam into molten silver. But we cannot delay here, for the guide has to convey us over the farther bridge on to Goat Island, where we land amid all the smiling glories of a garden, and inhale with satisfaction the perfumes of roses and heliotropes. The soil of the island is fertile; fine cedars grow in every direction, and there are elms and basswoods. Underwood is also plentiful, and the grass grows long and green. There was a smiling farm here once, and may be again, for there is an area of one hundred and fifty acres to the isle. But the fate of Goat Island is doomed. Sooner or later it will be all carried away by the remorseless water, which bears away, year after year, yards upon yards of its circumscribed and narrow bounds. It is a pleasant and a smiling spot in summer-time, much beloved by the white gulls that

hover with impunity close over the falls, and seize their finny prey in the very shadow of the great cloud of smoky spray that rises from the Horseshoe.

On the left side there is a bridge which connects with Terrapin Tower, built on a firm rock, right upon the verge of the precipitous cataract. We go across, and mount the stairs with somewhat stinted breath; and, when we arrive at the summit, we do, indeed, catch the sublimest view of the falls which can be found. We see nothing but the Horseshoe Falls, it is true; but we see all of that, and we discern the full fury of the torrent, and catch the utmost glory of the rainbow. The clouds of spray seem mounting up to us, to drag us down into the abyss below. They come wreathing up like exhalations from an enchanter's den, twisting themselves into fantastic shapes, that stretch forth arms to seize us in our tower of strength. We descend again, cross the bridge, and find ourselves again on Goat Island. Getting some refreshment in one of the many nice places round about, we take a rest, and then renew our investigations. From Termination Point we go down Biddle's Stairway, having donned

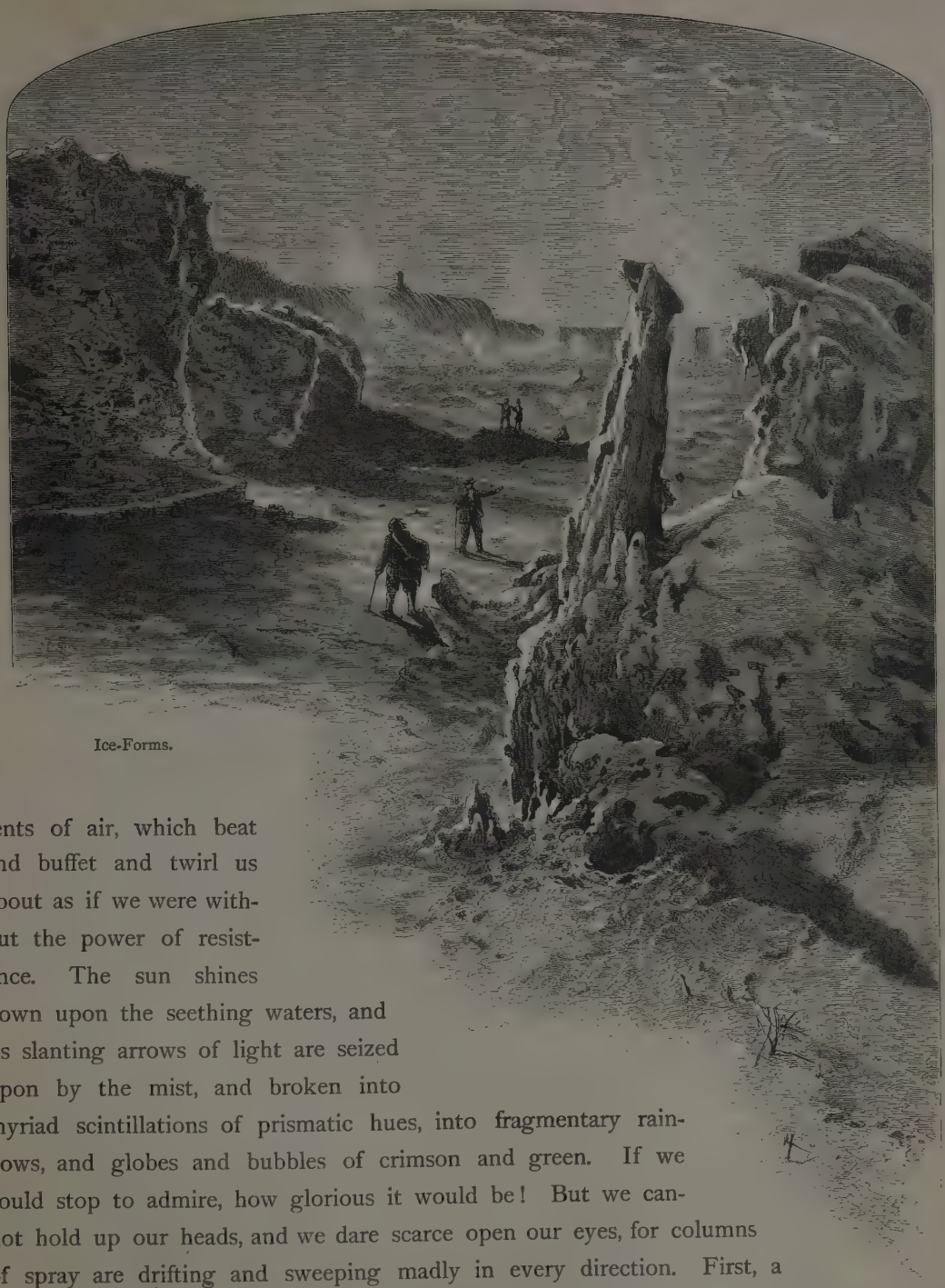


Below American Fall.



Luna Island in Winter.

oil-skin suits, and make our way painfully to the bottom of the rocks, which are even more arched in formation than those on the Canada side, and the pathway is still broader. Here we come to the famous Cave of the Winds, which has been for many years the great lion of the American Fall. Nature has been assisted here by the hand of man, for bridges have been built from rock to rock, under the very cataract itself, and amid all its vapory spray and turmoil and deafening roar. We stagger blindly on, preceded by the guide, and blinded by the torrents of spray that are incessantly dashed in our faces and on our backs. The concussion of the waters produces corresponding cur-



Ice-Forms.

rents of air, which beat and buffet and twirl us about as if we were without the power of resistance. The sun shines down upon the seething waters, and its slanting arrows of light are seized upon by the mist, and broken into myriad scintillations of prismatic hues, into fragmentary rainbows, and globes and bubbles of crimson and green. If we could stop to admire, how glorious it would be! But we cannot hold up our heads, and we dare scarce open our eyes, for columns of spray are drifting and sweeping madly in every direction. First, a torrent pours down upon our heads, protected by immense water-proofs; then another descends upon our backs; a third comes driving against our legs; a fourth, with an insidious spiral twist, manages to inundate our faces, in spite of the protecting hood; and they come with such violence that they fairly knock the breath out of our bodies. All this while our ears are stunned by a demoniacal orgy of sounds. The cata-

ract shrieks and groans and howls and bellows in fifty different accents at once, while over all dominates the deep, booming roar of the distant Horseshoe Fall. There are voices in the uproar, heard but faintly—voices that are not articulate to human ears, but such as pæans may have been sung in, or Orpheus may have charmed the brutes with. We cannot distinguish any words, and yet the voices are full of meaning. They seem to wail and to invite, to murmur and to threaten, and they are clearly distinguishable amid the hideous sounds that reign within the enchanted space.

Close here is the bridge which leads over to Luna Island, a small grain of dry land in the very curve of the fall. It is pleasant enough in summer, for it has evergreens, trees and bushes, grasses and wild-flowers in abundance, the atmosphere of spray by which it is surrounded being apparently favorable to vegetation. At night-time, when there is a moon, a fine lunar bow is visible from the bridge that connects it with Goat Island, and hence its name. But the great glory of Luna Island is in the winter, when all the vegetation is incrusted with frozen spray. The grasses are no longer massed in tufts, but each particular blade is sheathed in a scabbard of diamonds, and flashes radiantly at every motion of the wind. Every tree, according to its foliage, receives the frozen masses differently. In some, especially evergreens with pinnatifid leaves, each separate needle is covered with a fine coating of dazzling white. In others, where the boughs and branches are bare, the spray lodges upon the twigs, and gives to the eye cubes of ice, that greatly resemble the uncouth joints of the cactus. In some evergreens the spray, being rejected by the oleaginous particles, forms in apple-like balls at the extremities of the twigs and the nooks of the branches. Those close to the verge of the fall are loaded so completely with dazzling heaps of collected frozen spray, that the branches often give way, and the whole glittering heap comes flashing down in crumbling ruin. On the ground, the spray falls in granulated circular drops of opaque white; but, wherever there is a stone or a bowlder, ice is massed about it in a thousand varying shapes. Let us peep down from the verge, and, regardless of the noise and the smoke of the water-fall, give our attention solely to the ice. It stretches in great columns from the top to the bottom of the falls, and a colonnade is formed, such as one reads of in the fantastic stories of the East, where alabaster and marble, jade and porphyry, are carried to the skies in the tremendous palaces of preadamitic kings. The frozen spray, descending upon these, covers them with a delicate tracery of flowers and ferns, and even of resemblance to human heads, which is a beautiful sight and a strange. In winter-time we may not descend on the American side; but, if we might, surely we should discern the most wondrous ice-configurations along the verge of the pathway. The descent can be made at this time under the Table Rock; and the visitor passes from the stairways into a defile of the kind that Dante dreamed of in his frozen Bolgia. Along the side of the rock-walls are rows of stalactites, about the size of the human body, to which all of them bear a quaint resemblance. Upon the other side, massed

along the verge of the bank, are ice-heaps that mount up fifty feet into the troubled air, some of them partially columnar in shape, but the majority looking like coils of enormous serpents, that have been changed, by the rod of an enchanter, into sullen ice.

It must be remembered that, if winter gives much, it also takes much away. If it covers the trees and the grass with diamonds, and heaps up ice-serpents, and builds colonnades and spires and obelisks, it takes away a great part of the volume of the

Tree crushed by Frozen Spray.

water, for the thousand rills that feed the great lakes have been rent from the hills by the fierce hand of the Frost-giant, and clank around his waist as a girdle. Those who love color and light, and majesty of sound, will do well to come in the summer; those who like the strange, the fantastic, and the fearful, must come in the winter. But the true lover of the picturesque in Nature will come at both times. Each has its special charm; each has some things which the other lacks; but in both are features of transcendent beauty.

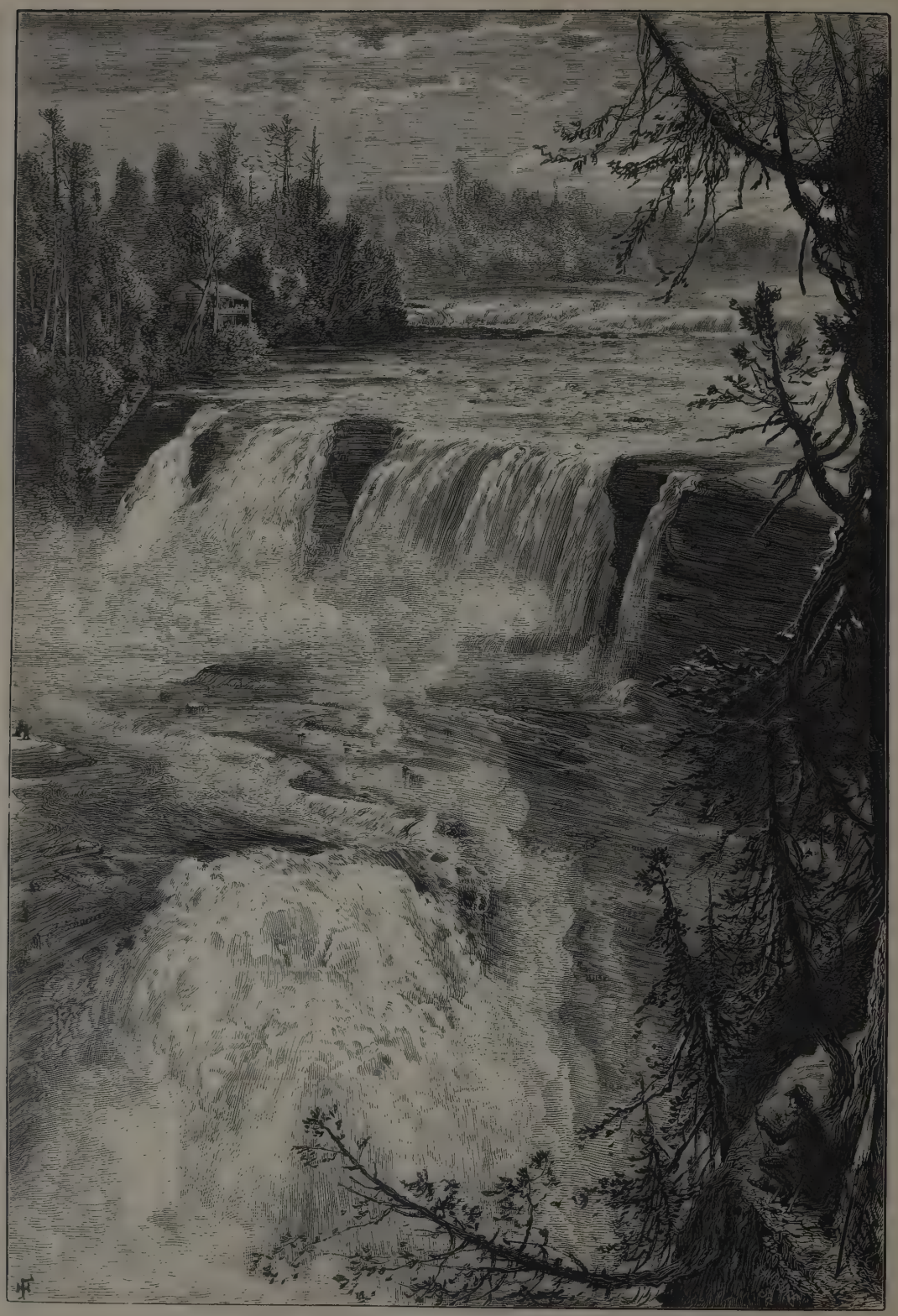
TRENTON FALLS.

WITH ILLUSTRATIONS BY HARRY FENN.

Sherman Fall.

MANY persons who visit Niagara from the East make a point of seeing Trenton Falls on their return, as this most picturesque and superb chasm lies almost upon the road, being some fourteen miles from Utica. Could the secret thoughts of these be made known, it is not impossible that we might discover a decided preference for the less famous place. Our expectations are so wrought up with regard to Niagara, by the praises of poets from every land, and by the efforts of the most famous painters

to translate its glories upon canvas, that, when we first see it, the feeling uppermost is, not unfrequently, one of disappointment, if not absolute dissatisfaction. It is not so with Trenton Falls, where we expect much less, and find, indeed, far more than was expected. And, again, the surroundings of the latter are in every way more pleasant. The exchange from the infinite extortions and swindlings, and the measureless rapacity of the Niagara cormorants, to the polished ease and refined hospitality of the Trenton Falls Hotel is one that inevitably puts us into good-humor with every thing we see, and enables us to see every thing through a roseate hue of pleasure. And, more than this, it must be admitted that the glories of Niagara are confined to the wonderful chasm through which that enormous body of water flows. At Trenton the approaches to the enchanted land are made through a beautiful pastoral country, where the fields, laden with bearded grain, rise and fall in undulating slopes and rich bottom-lands, permeated by babbling brooks, that go singing on their meandering way. The immediate advent to the falls themselves is in the close vicinity of the hotel. Leaving a beautiful and extensive garden on the right hand, smiling in all the luxuriance of the lush summer vegetation, we plunge at once into the heart of a forest filled with noble trees, many of them dark cedars of huge size, and spreading, feathery foliage. The light of the July sun streams through the dim cathedral atmosphere, made by the overhanging boughs, in broad, golden arrows, which, slanting through the heavier foliage of the trees, fall lovingly upon the earth beneath, covered in many places with an actual carpet of wild-flowers. Among these, the lovely bluebell is the most prominent, and, by contrast with the darker hues around it, specially of the mosses, its azure becomes almost violet in tone. The ground rises higher and higher, and beyond, in the immediate distance, we discern grand hill-forms, covered with noble trees. But, between them and us, there is a great gulf, for suddenly our progress is arrested. We find ourselves upon the very brink of a great chasm, whose very existence has been hidden from us, being masked by the rise of the earth, and by the glorious growth of the noble trees. Across upon the opposite side is a rock-wall of limestone, hard, and nearly black, that rises, almost perpendicularly, to a height varying from two to three hundred feet. This is crowned with great hemlocks, with fine birches, whose white trunks glimmer through the forest obscurity, and with cedars, many of which, from the yielding of the roots, are bent down at a most perilous angle, and hang over the abyss, nodding to their own expected and imminent fall when the wind strikes among their outstretched branches. Down below, the eye drops instinctively, as if to see what would become of them, and catches a glimpse of the Kanata River rushing onward through its rocky bed in a tumultuous torrent. Here the first descent is made by a series of wooden ladders, and, after a little exertion, we are landed safely upon the bank of the stream, which is composed of flat masses of limestone cut by the hand of Nature into great slabs, as evenly and as regularly as a mason would have done it. We look up and see the blue, brilliant sky, across



GENERAL VIEW OF TRENTON FALLS, FROM EAST BANK.

which the cedars hang in dark lines. We look ahead, and see the first one of the series of the falls, which are six in number, and known as Sherman Fall, after John Sherman, the grandson of Roger Sherman, of Revolutionary fame, who discovered this superb chasm in 1806. Here the river has formed an immense excavation from the limestone, and falls some forty feet into its bed below with a most furious roaring. Its color is a rich brown, which, touched here and there by slanting sun-rays, presents the hues of molten gold. Back of this sheet of water, the reaction of the torrent has worn away the rock in an exact circular curve, some ten feet in diameter, which exhibits a furiously-boiling caldron of white foam, streaked with every possible shade of brown. Below this is a cloud of spray, looking like the thick smoke of burning leaves, which hides the tumult of the falling water. Here, in the afternoon, is a most lovely rainbow, which forms at right angles to the chasm, and spans one side of the bank on the right-hand side. Some twenty yards from this spot a thin shelf of rock juts out from the wall, under which we stand perfectly sheltered from the showers of spray. Above this fall the Kanata boils in a succession of the most furious rapids, where the brown water is forced up into great ridges, on which the sunlight falls with most delicious effect. The walls on either side open out considerably, and their height varies, going down to one hundred and fifty feet, and mounting up two hundred feet higher at that point, which has been named the Pinnacle. The path here is very wide, and will allow of the progress of thirty and even forty people in places. But suddenly the rapid Kanata, as if jealous of her supremacy, makes a bend to the bank, and drives us all under a low, projecting cliff, where we are all compelled to bow the head. When this obstacle has been surmounted, we find ourselves immediately in presence of the great fall, two hundred yards ahead of us. This fall is duplex, but the eye from this point can take in all. Immediately in our front is a tumultuous mass of foam, covering a descent of forty feet. This distance is not overcome in one bold fall, but has evidently been broken into a succession of rocky stairways, so close to each other that the whole appears as one huge, extravagant, boiling stretch of whirling, shifting foam, quite covering the rocky ledge. Passing this, nor stopping to admire the great rapidity of the water rushing from the other half of this high fall, we see the latter in its full beauty. The water here rushes over a ledge of rocks, which stretch from bank to bank diagonally, with a full height of seventy-five feet. Above this the walls rise for one hundred and thirty feet, not quite perpendicularly, on account of a change in the stratification. For, between the great slabs of dark-gray limestone, come thin strata of loose, crumbling shale, which afford root-hold to dwarf cedars of low height, but of exquisite fulness of branch and foliage. In the centre of the ledge the black limestone shows in frowning masses, like the projecting corner of a bastion or a bartizan tower, and this divides the fall here into two. Between the opposite shore and this dividing rock the stream falls in a thin, silvery sheet for seventy-five feet, being broken into numerous cascades by projecting slabs

HIGH FALLS.

of limestone. But, close to the bank, at whose foot the visitors creep in alternate ecstasy and awe, is the great glory of the chasm. For here is the gross volume of the water poured in one tremendous, arching flood down into the bed below. On each side, where the leap is taken, are jutting masses of rock that enviously would hem it in, but, by contracting their gates, they only concentrate the strength of the leaping river, and add to the bold force of its curves. The color is an extraordinary topaz hue, like nothing ever seen in any other land, or in any other part of America. It resembles a cascade of melted topaz, or of liquid, translucent porphyry, as far as the color goes; but what can compare to the exquisite character of its changing tints? For, as the water descends, that which was brown becomes lighter and lighter, until actually white, and then, as it nears the smoky clouds of spray at its base, becomes dark again. It is like the changing sheen on velvet, or the glancing hues on the finest fur. Gazing steadily upon it, and letting its beauties infiltrate slowly into the mind, we realize how bold is the leap, how vigorous is the curve, for it is to the latter that this curious effect of colors is due. The stream is impelled forward into the air as vigorously as if shot from some wheel constructed by a Titan miller. Hence the immense clouds of spray that rise up from the boiling, seething, twisting, tormented flood below. The great chasm is full of it. It not only comes upon us in showers, and makes us hug the side of the bank, but it floats in great wreaths in the upper air, sailing through the chasm at a height far above that which rises from the second section below. Turning ungrateful backs upon the glorious topaz flow, we gaze down the gorge, lost in love and admiration of the God that made the world so fair.

The bank on the opposite side, owing to the shale additions, has lost its perpendicular majesty and frown, but has received compensation in gentler curves and in a mantle of lovely dwarf-cedars. High above us is the line of firs and cedars that stretch along the tops of the hills, forming the crests of the chasm; and beyond, below the first fall (which, however, cannot be seen, by reason of the curving of the stream), is the great Pinnacle, mitred with hemlocks and cedars, button-woods and great lindens. Below this the walls again become perpendicular, and shut out the day with their rock-curtains, leaving, however, a topmost peeping of brilliant-blue sky, and hints of gentle, golden clouds sailing placidly over the abyss. And then come the sunlight and its golden arrows to glorify the whole, and raise the pulse of ecstasy to maddening height; for beneath the touches of the sun-enchanter the clouds of smoke, as they break into mist-wreaths, are transformed into prismatic sparklets of transcendent glory, and below them a rainbow is formed, of such delicate beauty as words cannot paint. Higher, higher, sails the mist, and streams of radiant color impinge upon the deep green of the cedars and the hemlocks. The chasm becomes full of prismatic hues; it is alive with living light, glowing with strange, unexampled splendors, burning with lambent flushes; and the Kanata below, raging with all the wrath of battle with the primeval rocks, becomes

Part of High Fall.

glorified in patches here and there, and glows with all the lustre of burnished gold wherever the sunlight falls upon its waves. Even the dark pools, streaked with white lines of racing foam, become a tender green through the orange mist. And the diapason of its roaring becomes, to the ear of the man penetrated with the beautiful, a loud hymn of triumph and of praise to the great Maker of all. Nor will the wind

be denied its share in the choral lay; for it stirs the huge branches of the evergreen, and makes them give forth tender rustlings of thanks and joy. Earth, air, and water, join in one grand harmony; but man, the master-spirit, is silent, for in silence his spirit speaks most eloquently. But, though no word is spoken, the heart—the human heart that weeps and trembles—is touched to its remotest depths, and from its deeps comes back an answer to the song of the elements.

With eyes unsatiated, with ears that would fain drink in more, and with steps that reluctantly leave the enchanted spot, we turn once more to the topaz flow of the cataract, and we mount up a stairway, built by Mr. Moore, to a rocky plateau stretching out over the brim of the fall. Here we watch the crossing lines of the stream, that indicate the jarring violence of its currents, and laugh to see the great trees, that have been torn from their roots among the passes of the distant hills, come, swift as arrow from the Tartar bow, upon the surface of the waters, that hurl them down the remorseless rapids.

By this time, the ladies of the party are generally pretty tired, and are glad to find refreshment and rest at the Rural Retreat, a comfortable wooden *chalet*, built at the foot of the plateau, under the shadow of the bank. This is the half-way house. Here a halt is gladly made. But enthusiastic geologists take the opportunity of searching for fossils, for the rocks here abound in petrifactions. It would be useless to go into a detail of all the different genera and species of the fossils, but an omission of the large nilobite peculiar to this spot would be unpardonable. The generic name given to it by Dr. Dekay, of New York, is the isotelas; and it seems to be settled that it was a crustacean, of which the only living thing that at all resembles it in modern days is the horseshoe-crab. It had dorsal slips, or lobes, terminated like Indian paddles; so it is to be presumed that the isotelas could swim as well as crawl along the bottom of the sea. Besides this one, there are the fossils which all over the world are found in rocks of the same order and character. There are nilobites of other genera; orthoceratites, both large and small; ammonites and favosites; and other things of dreadful nomenclature, dear to the scientific heart. Besides these, there are those queer geologic forms known as geodes, which country-people believe to be thunder-bolts, but which, when broken open, show beautiful crystals of quartz.

After leaving the Rural Retreat, the chasm opens out to right and left, and the banks become less formidable. Two hundred yards from the Great Fall is another, which is called the Mill-Dam, from its regularity and soberness of demeanor. The ledge over which the waters pour in one uniform flood, with a descent of twelve feet only, extends from side to side in an unbroken stretch of level rock. There are no protruding masses of limestone here to disturb the equanimity of the Kanata, so that the landscape here presents nothing rough or angular. The banks are not more than a hundred feet high at this point; but they are perpendicular, and would be gloomy, were it not for the ex-

pansion of the chasm, which admits a full view of the vegetation on the tops of the banks. These are undulating, rising into hill-crests, and falling into pleasant dales, all being deeply wooded by fine trees. The path along the smooth, even, limestone rock becomes here broader and broader, until it opens out upon the Alhambra Fall, a place which has been the despair of artists and of descriptive writers. The rocks on each side

Alhambra Fall.

are here much bolder, and are fringed from top to bottom with superb cedars, extending down to the pathway. The branches are all thrust forward in fine, pyramidal shapes, the trunks being quite denuded, and as bare as the rock-walls which the cedars conceal. This gives to the foliage an unusual fulness and development. The rock-ledge over which the water tumbles is here quite naked, and fully sixty feet high, showing its stratification line upon line, tier upon tier. The top shelves over somewhat, and the water

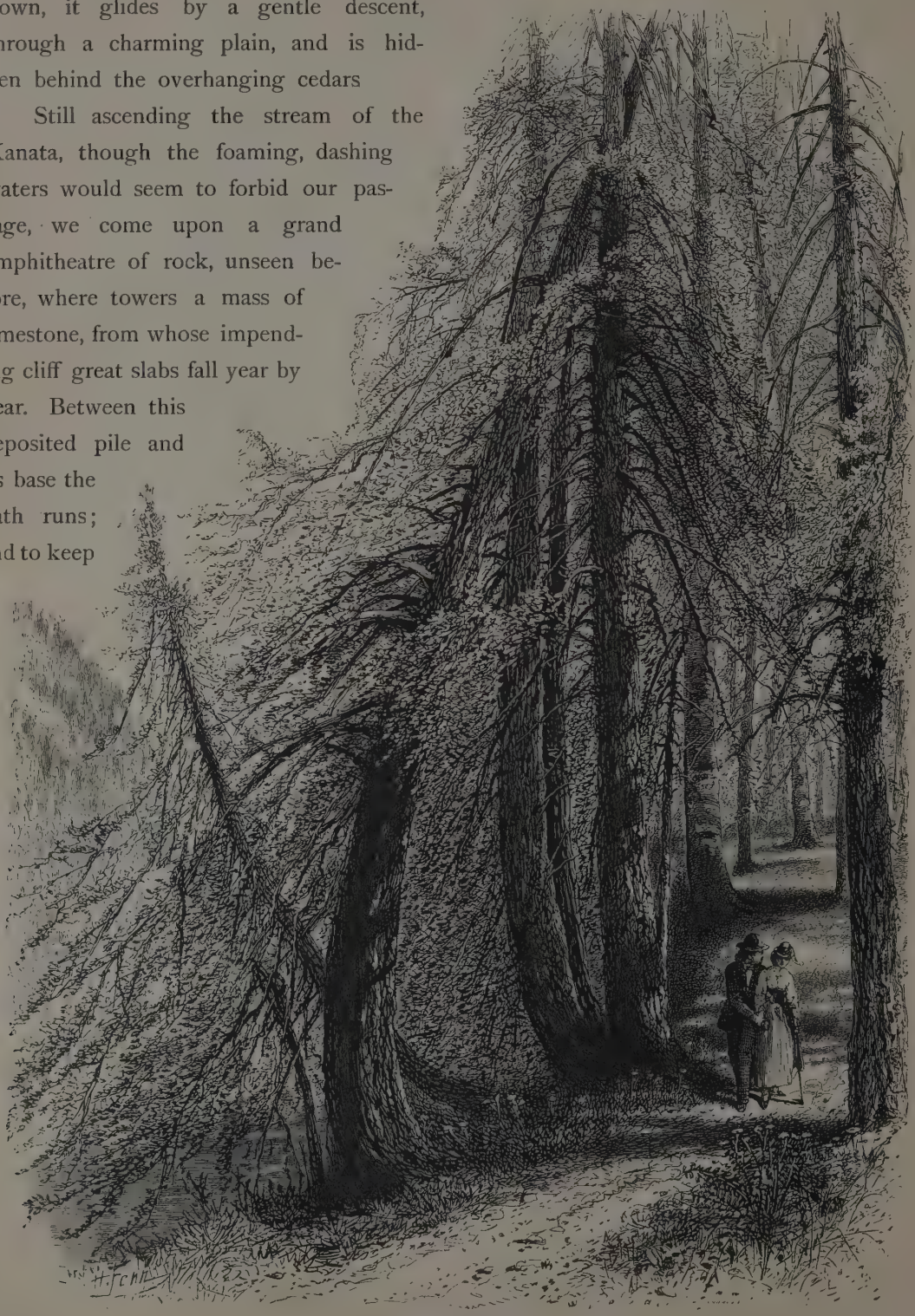
pours over this in a superb, amber sheet on the right hand; while on the left is a wild cataract, where the stream rushes over the various strata, arrayed like great stairs in a succession of infinitely-varied falls, combining the forms of the gentlest cascade and the most savage torrent. On the very verge of the rock, on the right hand, are tall cedars whose apices are lifted aloft, pointing up to the skies, and whose thick branches, elongat-

Head of the Ravine.

ing gradually toward the roots, reach far down the projecting cliff with an impenetrable shade of deepest verdure. ' And now the expansive form of the chasm suddenly contracts, and leaves a narrow aperture, through which we see mountainous walls retiring in various curvatures and projections. Directly opposite our eyes is a large rock, perpendicular as the Tarpeian Cliff, at whose base the waters glide with a swift, calm motion, and are dark and deep. Close to this, a tower of limestone rises in a vast column at

its side, commanding like a king the hills around. At our feet is a basin, where the water collects its forces, and reposes in preparation for the contests to come. Farther down, it glides by a gentle descent, through a charming plain, and is hidden behind the overhanging cedars

Still ascending the stream of the Kanata, though the foaming, dashing waters would seem to forbid our passage, we come upon a grand amphitheatre of rock, unseen before, where towers a mass of limestone, from whose impending cliff great slabs fall year by year. Between this deposited pile and its base the path runs; and to keep



Lovers' Walk.

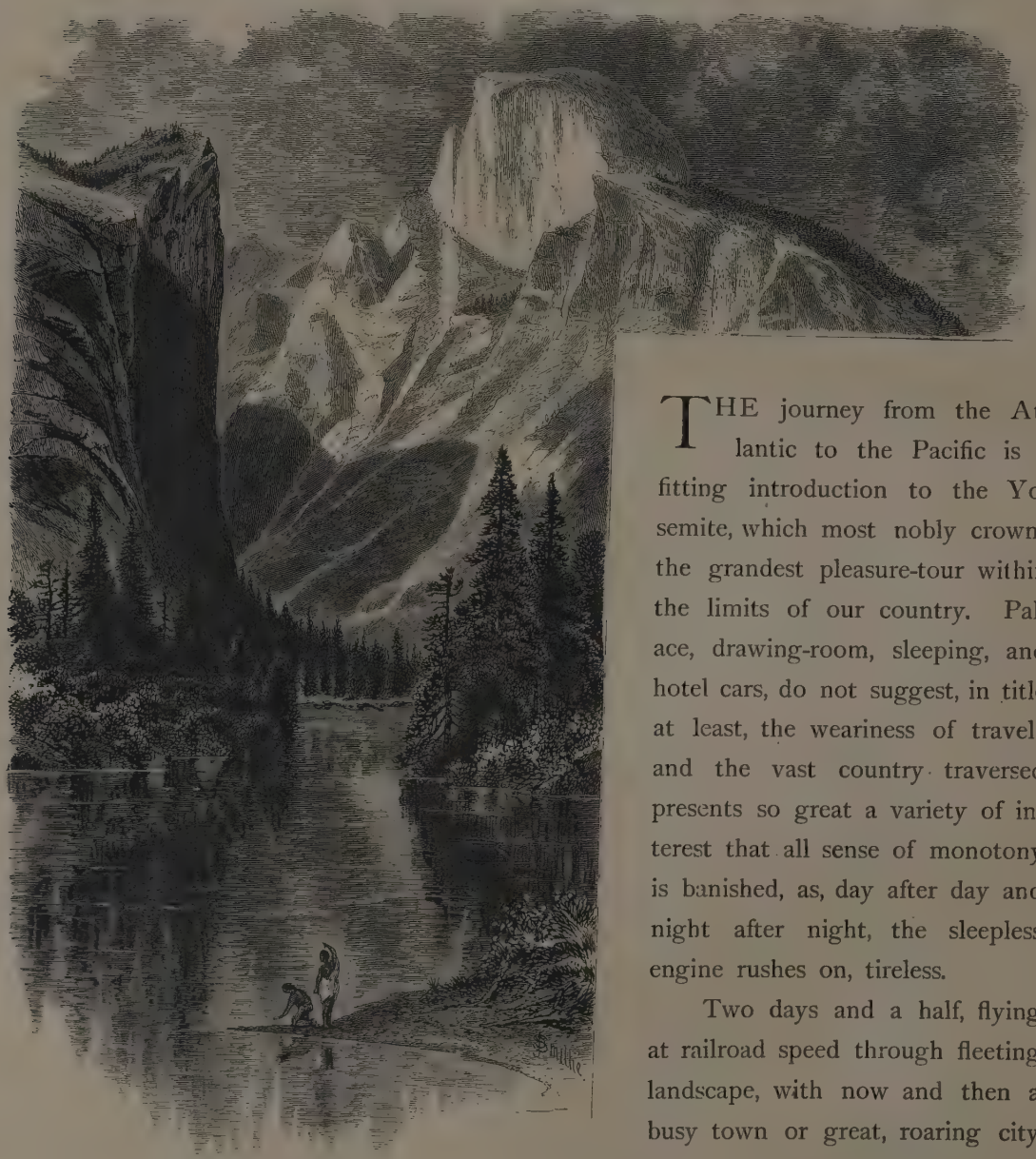
out of harm's way, for fear a slab should take a fancy to drop at the moment of our visit, we hug the water's edge, being less alarmed at its threatening roar than at the silent menace of the overhanging limestone. The danger from the falling rocks is greater in the spring-time, after the frosts of winter.

As we pass beyond this column, we discover a singular natural fireplace, carved out by the river, in a sportive mood, from some soft spot in the rock. Here, also, a rill descends a few feet below the shelving ledge of the summit. A cedar extends down its elongated boughs, which a sailor could easily seize, and mount upward. Here the stratum is composed of bivalve shelves, terebratulæ, and producti, with merely a cement to unite them together; and, a few rods up the stream, there is an extraordinary interruption of the strata—a dendriform interposition, which has very much the appearance, as to size and form, of an aged hemlock turned up by the roots, with its trunk inclining at a considerable angle. From this, passing a high projection, we come to a place where the stream gives an exemplification of its manner of working through the rock. The curvatures here are as regular as if drawn by the compass. One of these has been called the Rocky Heart, from its perfect resemblance to the ace of hearts. In a flat rock, on the same side, there is a circular hole, called Jacob's Well, which is five feet deep, and usually filled with stones of various sizes, worn perfectly smooth. These are of harder substance than the lime, some of them being granite; and the river uses them as a kind of drilling-machine, working them through the soft stratification. The walls, being every season penetrated by moisture, are also cracked asunder by the frost for an inch or more; and this, combined with the drilling process, produced the tremendous chasm. The passage beyond the Rocky Heart is difficult, and even dangerous; but to the intrepid it is usual to ascend up to the Born's-Bridge Fall, where the chasm commences, and where there is the first fall. The descent here is about twenty feet, and there are many beautiful points about it. But, after so much of the grand, the lovely, and the awful, the scenery here seems rather uninteresting.

The visitor is not likely to depart from Trenton Falls without visiting a beautiful avenue of hemlocks, near the hotel, known as the "Lovers' Walk." The bridal parties from the East who go to Niagara for their wedding-tour commonly make Trenton Falls one of their stopping-places; and Mr. Fenn has depicted a picture, under the shadows of the hemlocks, which the fine old trees often witness. It is a walk, shadowy, calm, sweet, and full of a tender beauty, well designed to suit the mood of lovers. We trust the illustration recalls to some of our readers a personal and agreeable experience.

THE YOSEMITE.

WITH ILLUSTRATIONS BY JAMES D. SMILLIE.



Half-Dome, from the Merced River.

THE journey from the Atlantic to the Pacific is a fitting introduction to the Yosemite, which most nobly crowns the grandest pleasure-tour within the limits of our country. Palace, drawing-room, sleeping, and hotel cars, do not suggest, in title at least, the weariness of travel; and the vast country traversed presents so great a variety of interest that all sense of monotony is banished, as, day after day and night after night, the sleepless engine rushes on, tireless.

Two days and a half, flying at railroad speed through fleeting landscape, with now and then a busy town or great, roaring city —two nights of hurrying sleep, and the journey from the Atlantic to the Missouri River is complete. The great plains of North America stretch away to the west, seemingly boundless as the ocean; a wild spirit of freedom breathes in the very air that pipes and whistles

through the train, in true nautical style, as the third night folds its dark curtains over these limitless wilds, and the sun of the fourth morning rises upon the same unbroken scene. Then come grand views of the distant Rocky Mountains, followed by the wonder-land of the Green-River country, where cliffs tower, wild and fantastic in form and color. Farther on, the grim walls of Echo, Weber, Devil's Gate, and Ogden Cañons, echo and reëcho the roar and thunder of the intruding train. The Wahsatch Mountains are passed, and the heavy waters of Salt Lake ripple and blaze, like burnished gold, in the light of the setting sun. On the morrow, barren, treeless mountains, alkali-desert, and sage-brush, reign supreme. Daybreak of the seventh, and last morning, gladdens the eyes with a sight of sturdy evergreen-forests. Now there is but a long down-hill to the plains of California; the character of the forest-growth changes; herbage is scant, and the bare earth is red-brown; the air is hot, and has lost the exhilarating vitality of the morning, heat trembles over the plain, and soon the engine pants in the seething crowd at Sacramento. Once more under way, the barriers of successive folds of the Coast Range are passed; and, at the close of day, crossing the bay to San Francisco, the chill Pacific wind greets the Atlantic traveller, forcing him, with a shiver, to draw close the overcoat that at noon would have been insufferable.

The Yosemite Valley lies among the Sierra Nevadas of California, nearly in the centre of the State, north and south, and midway between the east and west bases of the mountains, at this point a little over seventy miles wide. In a direct line it is one hundred and fifty miles almost due east from San Francisco, but at present it can hardly be reached by less than two hundred and fifty miles of travel. The name is an Anglicized or corrupted form of the Indian A-hom-e-tae, which means Great Grizzly Bear, supposed to be the title of a chief, and applied generally to a tribe that held possession of the region from the valley to the plains on the west. That name, however, was never given it by the Indians. They call it A-wah-nee, which finds its equivalent in the Spanish cañon or the English chasm.

In 1851 the miners and early settlers on the Mariposa estate were driven to desperation by these thieving Indians. A military company was organized to operate against them, and, directed by Tenaya, a friendly red-skin, they followed the flying and astonished aborigines into their innermost hiding-place, the now famous Yosemite. It was then the turn of the white men to be astonished; and, when the company returned to the settlements, marvellous stories were told of what had been seen. This is the story of the discovery. The Indians did not lay their first lesson well to heart. They continued their depredations, and, in consequence, another expedition chased them from their stronghold the following year. They fled to the protection of a powerful tribe, the Monos, farther in among the mountains; were hospitably received by them, but betrayed their confidence, and, in return, were slaughtered almost to the last man. Reports vary, but it is generally agreed that less than half a dozen of the Yosemite tribe now survive.

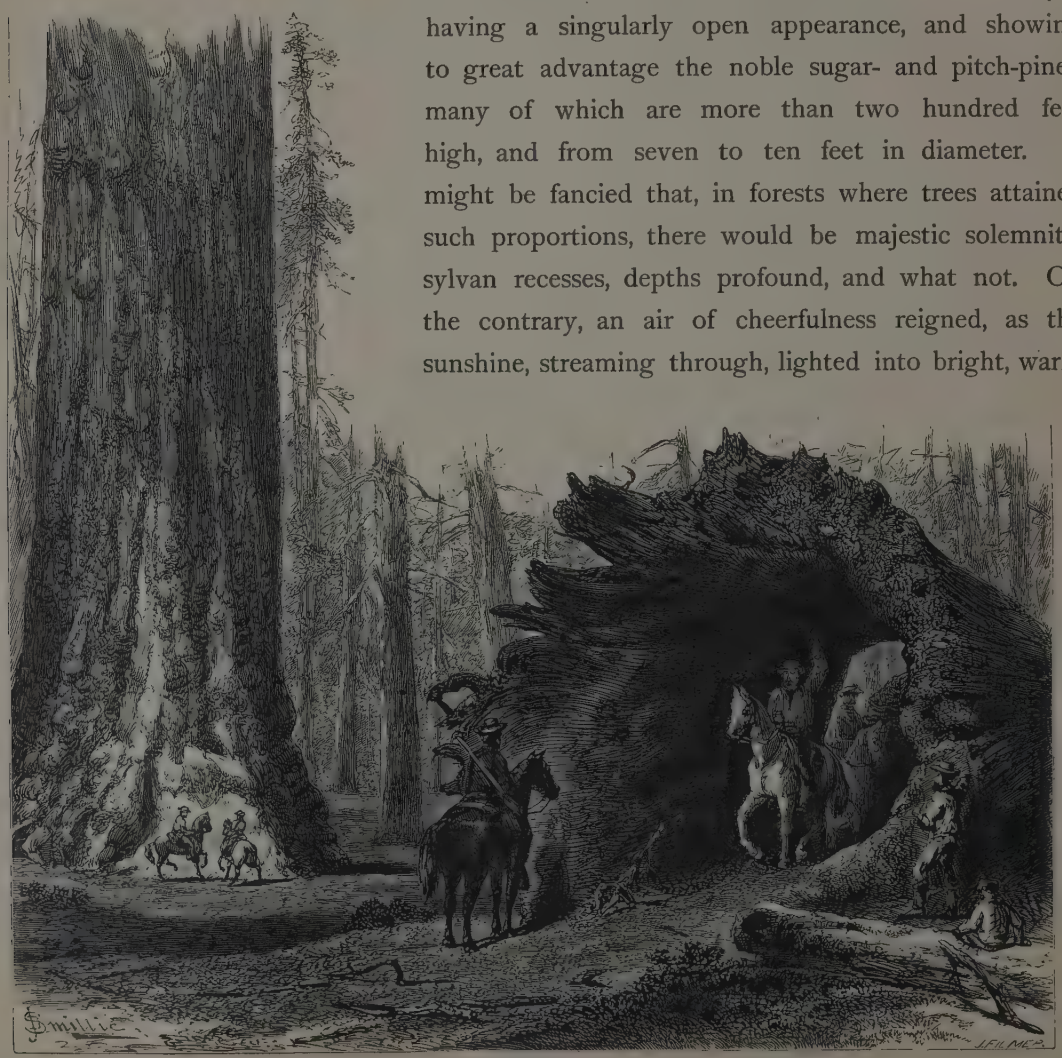
BIG TREES—MARIPOSA GROVE.

It was not until 1855 that the first tourists' visit was made to the valley. Then a party went in, under the guidance of Mr. J. M. Hutchings. The same season a second party followed; next year a trail was completed on the Mariposa side, and regular pleasure-travel commenced. The same year (1856) the first house or shanty was put up; but to Mr. J. C. Lamon belongs the credit of being the first actual settler. He built a cabin, and yet lives there, alone, summer and winter.

In 1864 Congress passed an act fixing the boundaries, and setting apart, "for public use, resort, and recreation," the Yosemite Valley and the Mariposa Grove of Big Trees. The State of California was to appoint commissioners and assume the trust, which at once she did, and the people of the United States rejoiced in their grand park. Claims have been made based upon the rights of settlers to land in the valley, but the courts have decided adversely to them.

It was one morning in June, as bright as such mornings usually are, that our little party started for Yosemite. Taking cars on the Central Pacific Railroad, we returned east eighty miles to Lathrop, and then, on what is known as the Visalia Division, turned south, crossing diagonally the broad valley of the San Joaquin. The road is now finished, so that travellers may go almost to the foot-hills of the Sierras by rail. We trundled along in good old style, with a coach-and-six. The wheat-harvest was already being gathered, and nothing could be more foreign to Eastern eyes than the huge machinery, barn-like in dimensions, drawn by a score of mules, "heading" a swathe of at least fifteen feet wide. Every thing was in proportion to the vast fields, of thousands of acres each, that had to be worked over. The heads only of the wheat were cut off, the stalks being left for fertilization, or for the cattle that are allowed to range, fall and winter, over these fenceless plains. The exact line of our road seemed to be largely a matter of will on the part of our driver, for he drove wherever he pleased; no barriers prevented, and most of the grain had been cut. No tree, or bush, or living green thing, gave vitality to the landscape. Through a thin, tremulous haze, the forms of the Sierras in the east, and the Coast Range in the west, were faintly visible. The sky overhead was cloudless, a deep violet tint pervading, in strong contrast to the earth-tones of ochre and orange—a strange combination, blending duskily at the horizon, and in tint and tone calling to mind familiar pictures of Egypt, Syria, and the East. After several hours' riding, exposed to a fierce sun, the scene became monotonous, and by degrees very tiresome. At last the Sierra forms loomed up, distinct and near, inviting visions of breezy heights and refreshing forest shadows; but hours of disappointment followed, for, to the toil of climbing among the foot-hills, was added the loss of the breeze that blows regularly over the plains, even though it were a warm one. Already, at this season, the earth was browned; herbage was scant; ochre, umber, and sienna-tints prevailed; the leaves of the buckeye were falling, crisp and dry; dust covered the glossy green of the beautiful manzanita; the digger-pines stood samples of attenuation; and, over all, pervading all, was a

sentiment not so much of decay as desiccation. Hornitas, an irregular and uninteresting gathering of buildings, was passed; and, from the heights beyond, the plains could be seen stretching in luminous obscurity. Very gradually the barrenness gave place to chaparrals of oak, manzanita, and chamiso; and trees clothed the crests of the mountain-spurs, after the manner of forests. At last we reached Mariposa, about thirty miles from the plains by the road we travelled, and calling to memory only a dusty, hot street; low, shabby-looking brick buildings; and surrounding hills, that were without any compensating wildness or beauty to excuse them for standing as barriers to the longed-for breezes. Here the forests began to assume a more familiar appearance, as oaks and evergreens clustered in denser growth. Ten or fifteen miles farther on, at an elevation of more than three thousand feet, the timber was superb. Coniferous trees preponderated, different varieties of oak being next in importance. Compared with Eastern-State forests, there is very little undergrowth, the woods having a singularly open appearance, and showing to great advantage the noble sugar- and pitch-pines, many of which are more than two hundred feet high, and from seven to ten feet in diameter. It might be fancied that, in forests where trees attained such proportions, there would be majestic solemnity, sylvan recesses, depths profound, and what not. On the contrary, an air of cheerfulness reigned, as the sunshine, streaming through, lighted into bright, warm



Fallen Sequoia.

color the shaft-like trunks of pitch-pine and cedar. At Clark's Ranch, more than fifty miles from the plains, the carriage-road ends, but it has been surveyed and partially completed into the Yosemite. Here, then, the scant baggage was to be transferred to the backs of mules, and the remaining twenty-four miles done in the saddle; but, before going on, it is usual to spend a day among the big trees of Mariposa, four miles distant, but not in the direction of the Yosemite.

The grant of the Mariposa Grove covers four sections, or two miles square, and is under the charge of the Yosemite commissioners. The first that was known of the big trees was in the spring of 1852, when a hunter discovered what is now called the Calaveras

Bridal-Veil Fall.

Grove. He could get no one to believe his story, and had to resort to a trick to get any of his companions to go with him to the trees, so as to verify his statements. Once verified, descriptions were widely published, and, from San Francisco papers, copied into English prints. In 1853 an English botanist published a scientific description, and designated the tree as the *Wellingtonia gigantea*. In 1854 an eminent French botanist, M. Decaisne, at a meeting of the "Société Botanique de France," presented specimens of the big trees and redwood that he had received from the consular agent of France at San Francisco. He explained at length his reasons for considering the big tree and redwood as belonging to the same species, *Sequoia*, an affinity the English botanist had overlooked; so, in accordance with the rules of botanical nomenclature, the new species was called *Sequoia*

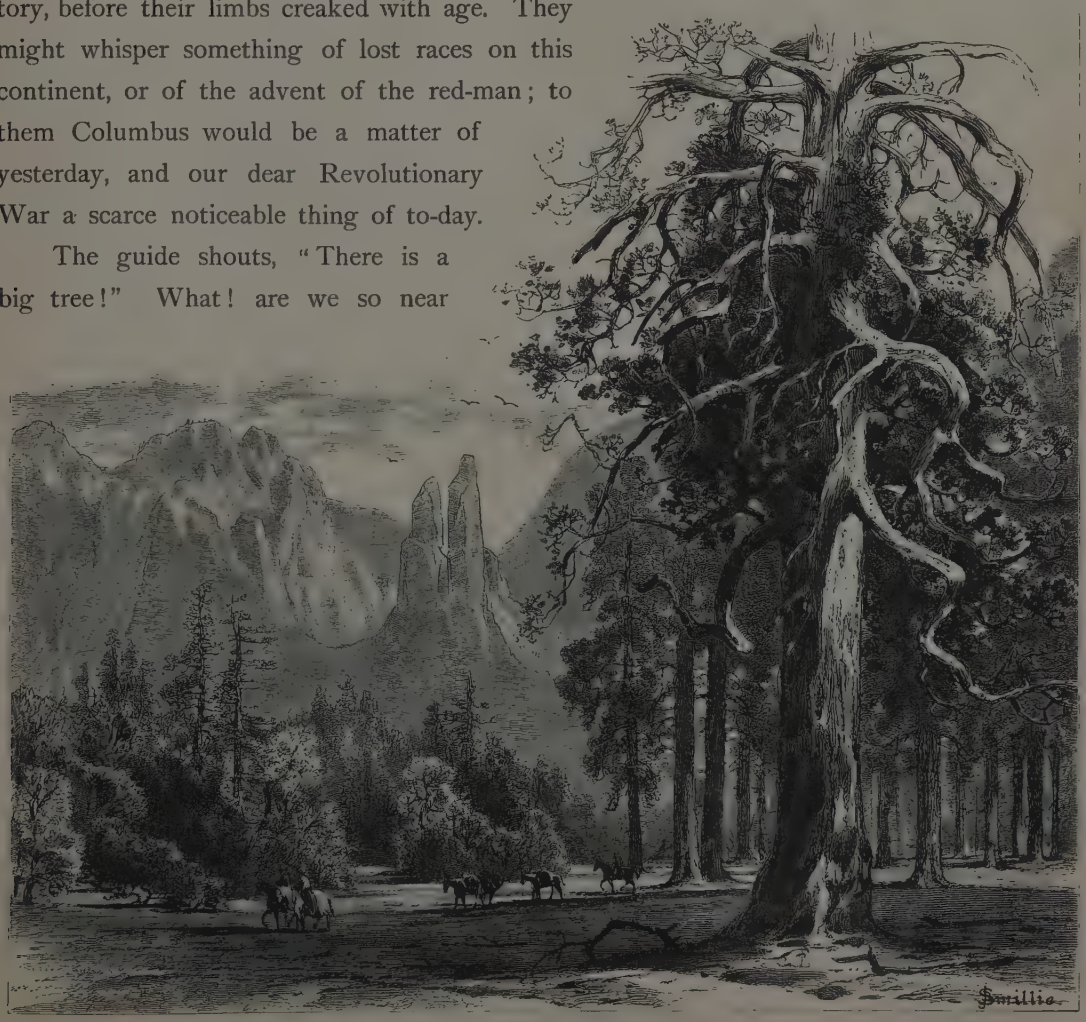
gigantea. Professor Whitney, State Geologist of California (upon whose faithful work I have drawn liberally), says: "It is to the happy accident of the generic agreement of the big tree with the redwood that we owe it that we are not obliged to call the largest and most interesting tree of America after an English military hero. Had it been an English botanist of the highest eminence, the dose would not have been so unpalatable." (Sequoia, it will be remembered, was the name of the Cherokee Indian who, early in this century, invented an alphabet and written language for his tribe.) So far as is yet known, there are but eight distinct patches or groves of the big trees. They are very limited in range, and seem to belong exclusively to California. They form groves, largely intermixed with other trees, very little below five thousand and never over seven thousand feet above sea-level. They have been, without difficulty, largely propagated from the seed, and fine specimens are now growing in many parts of America and Europe. A few miles south of the Mariposa Grove, the *Sequoias* seem to find a more congenial home, and may be found of all ages and sizes, from the seedling up. A mill, at this place, saws them into lumber. Professor Whitney closes his very interesting chapter by saying: "The big tree is not that wonderfully exceptional thing which popular writers have almost always described it as being. It is not so restricted in its range as some other coniferæ of California. It occurs in great abundance, of all ages and sizes, and there is no reason to suppose that it is now dying out, or that it belongs to a past geological era, any more than the redwood.

"The age of the big trees is not so great as that assigned by the highest authorities to some of the English yews. Neither is its height as great, by far, as that of an Australian species, the *Eucalyptus amygdalina*, many of which have, on the authority of Dr. Müller, the eminent government botanist, been found to measure over four hundred feet." The tallest *Sequoia* that has been measured is in the Calaveras Grove, being three hundred and twenty-five feet high, overtopping Trinity-Church spire (a standard of height familiar to most New-Yorkers) by forty feet. The greatest in diameter is the "Grizzly Giant" in the Mariposa Grove, which measures thirty-one feet through at the ground, and twenty feet at eleven feet above the ground. Clarence King described one that he saw in the forest some miles south of Mariposa, "a slowly-tapering, regularly round column, of about forty feet in diameter at the base, and rising two hundred and seventy-four feet." A very large tree in the Calaveras Grove, twenty-four feet in diameter, was, after much labor, cut down, and the base, at six feet from the ground, was smoothed and prepared as a dancing-floor; thirty feet farther up, the trunk was again cut through, and the rings, marking the growth of each year, were carefully counted. Upon this evidence, after making allowances and calculations, Professor Torrey pronounced the tree about thirteen hundred years old. It is not likely that any now standing are much older.

The ride from Clark's Ranch to the grove is less than four miles; so, after an early

breakfast, we started for a day of picnic and sketching. The trail was well worn and easy, the air gloriously pure, and the forest delightful. It would be useless to attempt to describe the confusion of sentiment and impatience that possessed me as I rode along, peering anxiously through the labyrinth of the wood for the first glimpse into the vast portals of that grand old grove. Memory recalled the solemn gloom of a hemlock-forest among the Catskill Mountains—if that was dark, then surely this must be savage—if that was solemn, then this must be awful! To me, the sighing of summer breezes through those high tops would be the ghostly echo of wild storms that had done battle with them for hundreds of years. Inarticulate with the lore of dead ages, their moans would breathe the sad history of centuries past; their towering heads, with scarce perceptible nod, would tell of Goths and Vandals that scourged Europe when they were young; of King Arthur and "his table round," while yet they were in the vigor of early maturity; and of Mohammed and his wars, written upon the page of history, before their limbs creaked with age. They might whisper something of lost races on this continent, or of the advent of the red-man; to them Columbus would be a matter of yesterday, and our dear Revolutionary War a scarce noticeable thing of to-day.

The guide shouts, "There is a big tree!" What! are we so near



Valley Floor, with View of Cathedral Spires.

the sacred precincts? Where is the atmosphere of awe? where the elements that were to hush the voice, and fill the whole being with reverential exaltation? Alas! there was the first big tree, sunlight sparkling all over its great cinnamon-colored trunk, and I was ready to shout, and, spurring my prosaic beast, to rush with the rest in a graceless scramble to be first to reach his majesty's foot. The charm was broken. I was willing, anxious to be deeply moved, but no answering emotion came—such moods do not come at the bidding. Unsought, they have welled up since at thought of that day—but not then; no, not then. I had built an ideal grove, and at first sight it was demolished, but that was no fault of the Mariposa big trees. There was no gloomily grand grove, there were no profound recesses; the great trees stood widely apart, with many pines and firs interspersed, and sunlight streamed down through all and over all. I wandered about, sorely disappointed that they did not look bigger, and yet every sense told me that they were vast beyond any thing that I had ever seen; and it was not until after I had been among them for hours, and had sketched two or three, that their true proportions loomed upon my understanding. Then I wondered at the practical man who was "pacing-off" the diameter of the "Grizzly Giant," and at the woman of little faith, who had brought with her a piece of twine to verify the oft-told story of size. It is hardly possible to form a just idea of size or height until, getting at a distance where the whole tree may be seen, a mounted figure takes position at the base, thus establishing an initial point for computation. In form they are often savagely gaunt, their respiratory apparatus of foliage being in remarkably small proportion to their tower-like trunks. The bark is very light and fibrous, like the outer sheath of a cocoa-nut, of a singular cinnamon-color, and running in great ridges that vary from ten inches to three feet in thickness. Some trunks appear quite smooth, but others are warted and gnarled as though wearing the wrinkles of great age. The Indians and sheep-herders have been accustomed every year to burn the undergrowth through the woods, and by this practice, now strictly prohibited, most of the trees in the Mariposa Grove have been injured, a few but slightly; but, in many cases, soundness and beauty have been seriously impaired. On an area of thirty-seven hundred by twenty-three hundred feet there are just three hundred and sixty-five *Sequoias* of a diameter of one foot or over, but not more than twenty are over twenty feet in diameter. Two or three, greater than any that stand, now lie prone and broken; the trail lies through the hollow section of one that has fallen and been burned out. An ordinary-sized man, sitting upon a horse, can but just touch with his knuckles the blackened arch overhead.

The afternoon, rich in contrasts of glowing lights and broad shadows, too quickly followed the inquisitive glare of noonday sun; pictures in effect and color presented themselves where, an hour before, there had been only a confusion of petty forms, sharp and shadowless, under the almost perpendicular rays of sunlight; the novelty of first acquaintance was wearing off, and the true grandeur of proportions was developing with

CATHEDRAL SPIRES.

fascinating rapidity. The spirit was groaning within me that pencil and color in my hands were so weak, when through the hush came the faintest mutterings of distant thunder. The rest of the party had gone, and with them the picnic element. I was alone, and the booming of the rapidly-nearing storm, as its echoing waves of sound rolled through the pillared forest that seemed to stand dumbly expectant, was to me the grand original, of which grimly-solemn cathedral and deepest organ-note are but a type. Threatening clouds darkened the sky, a few great drops of rain adding emphasis to the warning. Hastily gathering my scattered scraps, I retreated, but not without a last, hungry, devouring look. Now there is pictured in memory a mighty shadowed forest, its branches moving uneasily, and sighing as the storm sweeps torrent-like through it.

As has been already stated, Clark's Ranch is the present end of the carriage-road, and the beginning of the bridle-path into the Yosemite, which is only twelve miles distant in a direct line, although nearly twice that by the trail. Its altitude is about four thousand feet, being a little higher than the floor of the valley, but between it and the valley lies an elevation that must be crossed, which is about three thousand five hundred feet in height, nearly equal to the average of the Catskill Mountains, the highest point reached in crossing being seven thousand four hundred feet above the sea. Here are barns and stables, a saw-mill, and several long, low, irregular one-story houses, with characteristic arrangement of verandas, upon which open all the doors and windows, there being no passages or hall-ways in the buildings. Guides, hunters, and dogs, loiter about; horses wait in groups, saddled and bridled; uneasy travellers flit from house to house, and an air of business generally possesses the place, in spite of the close, hedging, heavy timber, that brings the air of the primeval wilderness to the very doors.

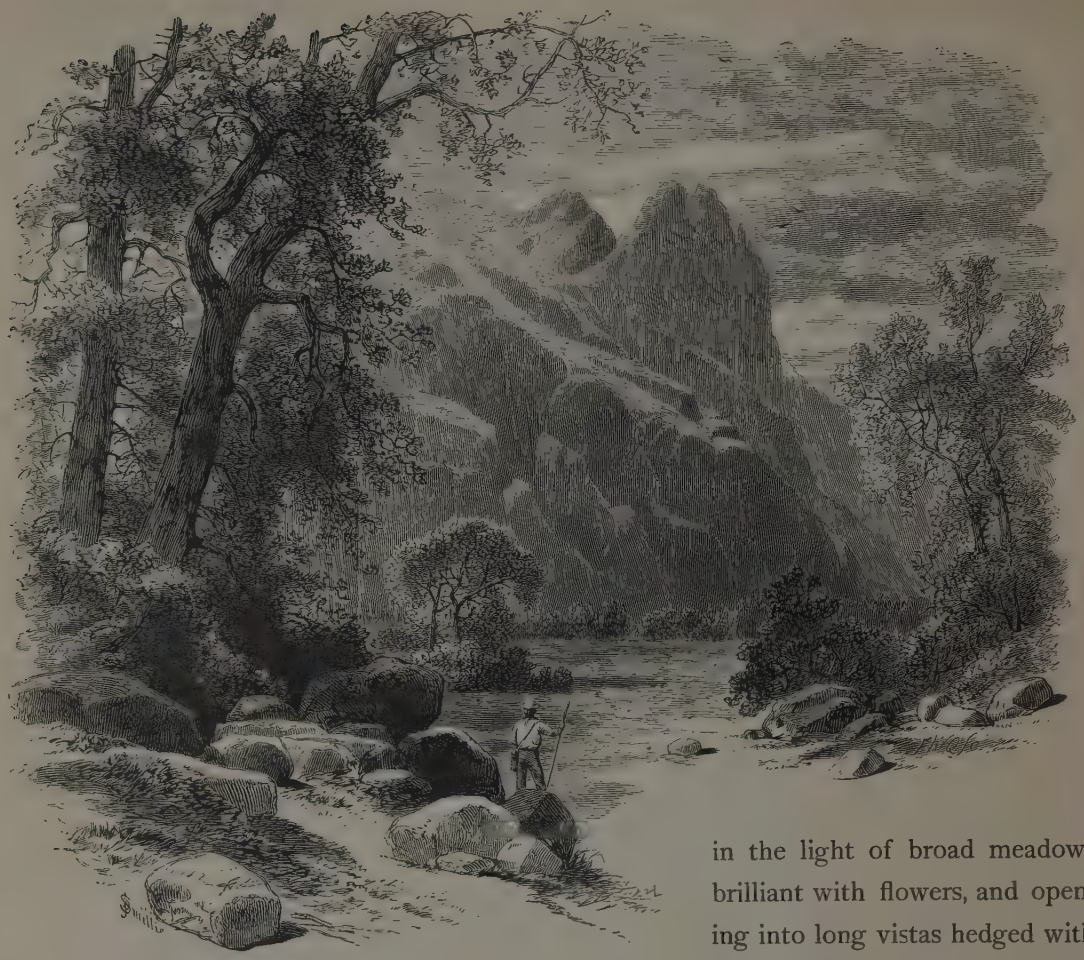
Our scant luggage was securely packed for the ride, and early in the morning the horses were brought out—a dejected-looking lot, each with a rope-halter about its neck, giving more the appearance of so many candidates for the gallows than toilers for a pleasure-party. It was interesting to watch the packing of the load upon the mule's back, the curiously-intricate cording and strapping, and then the final binding of beast and burden into one inseparable mass. Two strong men laid hold of the ropes, the passive mule between them, and pulled as though striving each to outdo the other. Could toughened hide or bony framework resist? The brute made no sign. They placed each a foot against the pack, and their weight was added to their muscle for one final effort; a faint ugh! came from the stolid creature, and a crunching sound, as of a great egg-shell in collapse, told me that my sketch-box had come to grief; but no matter, there was no time to stop for trifles; a heavy hand took hold upon the top of the pack, vigorously shook it—the mule vibrated as though it were part and parcel. "He must get out of his skin before he can get out of that," said the guide, and he was started on the trail.

It is not necessary to go all the way to the Yosemite to enjoy the picturesque ef-

fects of a party of pleasure-seekers, *en route.* The gay colors that inevitably find place, the grouping, action, light and shade in constantly-changing combination with the surrounding landscape, are a never-failing source of pleasure. Now, in bright sunlight, every spot of color tells with intensest power against a mass of sombre green; again, in the deep shadow of a wood, they form yet deeper shadows, and their richer color darkens

Sentinel Rock and Fall.

against the light beyond. Crossing an open space, how a white horse with red-shirted rider puts a climax upon all that there is of light and color; or, straggling over an upland waste of blinding-white granite-sand, how invaluable to the picture the strong relief of the black mule and his grotesque pack! So we spent the morning, crossing streams and climbing hill-sides, thankful for the cool, fragrant shadow of dark pines, and rejoicing

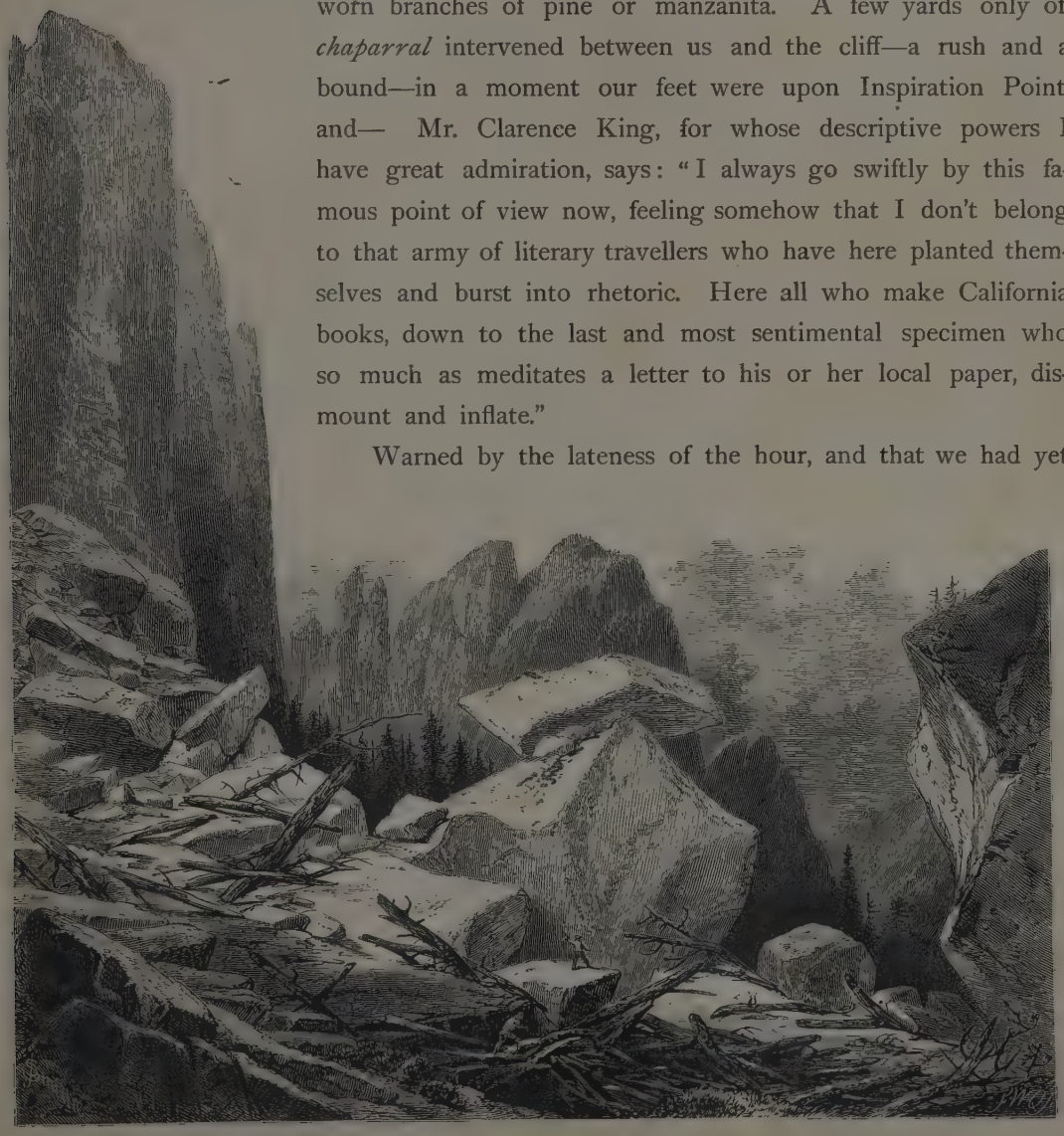


Sentinel Rock from the North.

in the light of broad meadows brilliant with flowers, and opening into long vistas hedged with close-standing fir-trees. Now and then a broad waste of rock had to be passed, and several times, from heights, we had views of the high Sierra peaks. It was soon after noon when we reached Paregoy's, a cattle-ranch and half-way house. Meadows, covered with natural grasses, following the course of running streams, stretched for miles in narrow belts, where great numbers of horses and cattle roamed and found pasture. We were surprised by a remarkably good dinner, although the request for a boiled egg could not be complied with—twenty minutes of trying proved an utter failure; we were a little over seven thousand feet "up in the world," where eggs do not observe the "three and a half minute" rule as they do upon lower levels. It was not long before we were again mounted and on the way, impatient to get over the five miles that intervened between us and Inspiration Point. If, the day before, we rode in the excitement of expectation, it was intensified now; every step brought us nearer to a place that hitherto had been to me like some crater in the moon or spot on the sun. There was no doubt as to its existence, but it belonged to the realm of fancy, now to be transferred to the real —a change almost dreaded. It is dangerous work to force our ideals from fancy to fact.

from poetry to prose. I knew it, and these questions were constantly repeated: Was grim disappointment waiting? were the senses to be benumbed on that dizzy height? would every line and every color harmonize to produce an effect overwhelming? At last, through the trees, there gleamed a pale, mist-like whiteness—it must be a wall of rock—could that be the first sight into the valley? The pulse quickened, the hard saddle and the shabby shamble of the offending beast underneath were forgotten, as he forced himself into quicker gait in answer to impatient drubbings; a few moments more, and we rode out to a clear space under pine-trees, where every evidence was presented of the many feet that had halted there before us; so, following their indications, and the unmistakable suggestions of our prosaic beasts, we alighted, and fastened them to well-worn branches of pine or manzanita. A few yards only of *chaparral* intervened between us and the cliff—a rush and a bound—in a moment our feet were upon Inspiration Point, and— Mr. Clarence King, for whose descriptive powers I have great admiration, says: "I always go swiftly by this famous point of view now, feeling somehow that I don't belong to that army of literary travellers who have here planted themselves and burst into rhetoric. Here all who make California books, down to the last and most sentimental specimen who so much as meditates a letter to his or her local paper, dismount and inflate."

Warned by the lateness of the hour, and that we had yet

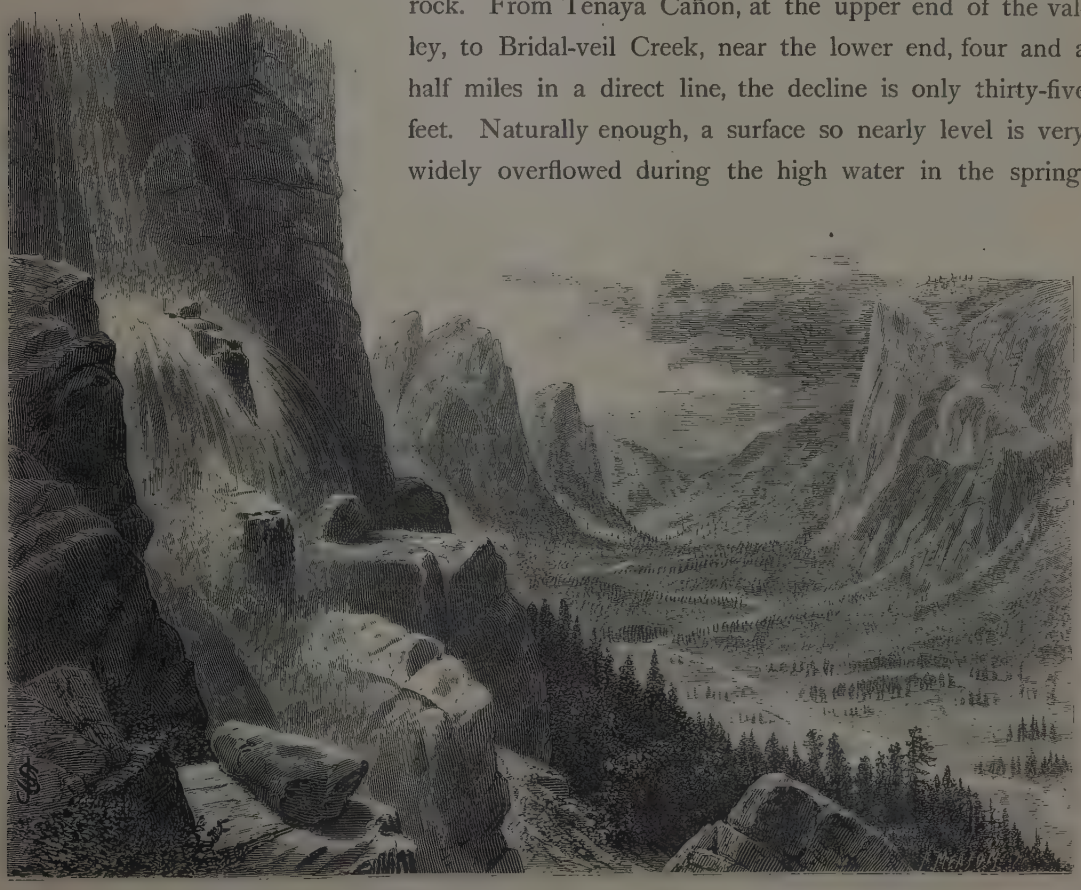


Rock Slide.

seven miles to ride before we could reach the nearest house, we again mounted our horses, and commenced the descent, nearly three thousand feet in three miles, over a very tortuous trail, rocky or dusty by turns, extremely tiresome to the wearied body, but never dangerous, there being no cliffs or precipices such as formed the grand picture constantly before us. Pine-trees, more or less dense, sheltered the way; and the scenery was enough to lift any one, not hopelessly dead or unobservant, far above the petty discomforts of saddle or trail. Every change of position presented some new charm—trees grouped into picturesque foregrounds, finding bold relief in light and shade against the opal and amethyst tints of distant granite cliffs; flowers nodding in the breeze that brought refreshment to the brow and music to the ear; and little streams dimpling and gurgling across the trail, as if unconscious of the terrible leaps that must be taken before reaching the river below. In strong contrast to this living, moving beauty, beyond all, the walls, towers, and domes of the Yosemite rose grand, serene, impassive, broadly divided into tenderest shadow and sweetest sunlight, giving no impression of cold, implacable, unyielding granite, but of majesty, to which our hearts went out as readily as to the flowers and brooks at our feet. As we approached the level of the valley and the open meadows, the groves of trees and the winding river were more distinctly seen—the glorious, park-like character of the place presented itself. Why not cultivate carefully these natural beauties—make lawns of the meadows, trim out the woods that the different trees may develop their fullest form, and control the river's course with grass-grown banks? At last, the foot of the descent was reached, and away we cantered in the evening shades, the black-oaks lacing their branches overhead. Trees, bending in graceful framework, enclosed various pictures, one of the most charming being a view of the Bridal-veil Fall as it sprung over the wall nine hundred feet high. Its upper part sparkled a moment in the sunlight, a solid body; then, as though wrestling with invisible spirits, it swept into a wild swirl of spray that came eddying down in soft mists and formless showers. Emerging from the wood, a broad meadow lay before us; and high over all projected, far up against the eastern sky, the Cathedral Rocks, with buttresses cool and spires aglow. At their foot the river crowds so close that the trail is forced to find its way through a wilderness of great granite blocks, that lie embowered in a forest which has grown since they were hurled from their places on the cliffs above. Then followed a long level, and groves of pine and cedar. After the fatigue and excitement of the day, it was like entering a sanctuary, the spirit of the place was so solemn and full of rest. There was no sentiment of gloom, but rather of deep, slumberous repose; the thick carpeting of sienna-colored pine-spindles that covered the ground hushed each foot-fall; the pillared tree-trunks formed vistas that stretched, like "long-drawn aisles," to profoundest forest-depths; the branches, "intricately crossed," did not obscure the luminous sky above, or hide the tall cathedral-spires that burned ruddy in the last gleam of day; refreshment and invigoration were in the very atmosphere; with thankfulness, my whole being drank

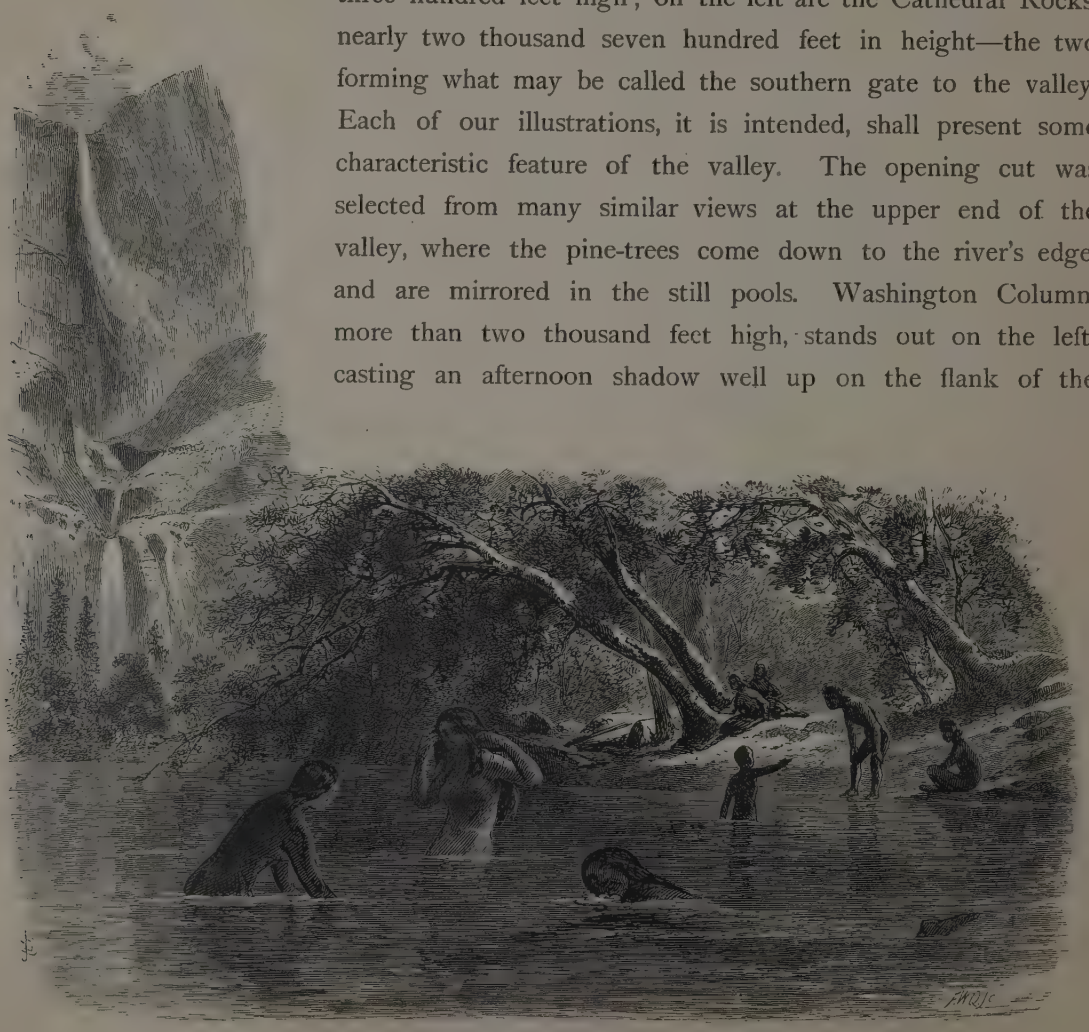
deeply, and, when in the gray of evening the hotel was reached, I was cool, calm, and—very hungry.

The first week after our arrival was spent making acquaintance with the more common points of interest and attraction. At first, submitting to the guides, we rode in beaten paths, and wondered and admired according to regulation; but, after a day or two, such bonds became irksome, and we ranged at will, there being really no need of a guide in an enclosure six miles long and at most but a mile and a half wide—no need of any one to direct attention to what the eyes could hardly fail to see, or the senses discover for themselves; and, then, it was so much more delightful to wander undirected and unattended, on horseback or on foot, regardless of conventional ways, and yielding unreservedly to each new enjoyment. We soon knew each meadow and the separating groves of trees, every stream and every ford across the river. Within the limits we ranged there are but eleven hundred and forty-one acres of level bottom, according to government reports—a surface only about one-third greater than that of the Central Park of New-York City—and of this seven hundred and forty-five acres are meadow, the rest being covered with trees and *débris* of rock. From Tenaya Cañon, at the upper end of the valley, to Bridal-veil Creek, near the lower end, four and a half miles in a direct line, the decline is only thirty-five feet. Naturally enough, a surface so nearly level is very widely overflowed during the high water in the spring,



Foot of Sentinel Fall

caused by melting snows among the mountains beyond. The meadows are covered with coarse, scant grass; and innumerable flowers, generally of exceeding delicacy, find choicest beds in slight depressions, where the water lies longest. Through these meadows the Merced River winds from side to side, during the summer an orderly stream, averaging, maybe, seventy or eighty feet in width, the cold snow-water shimmering in beautiful emerald greens as it flows over the granite-sand of the bottom. Its banks are fringed with alder, willow, poplar, cotton-wood, and evergreens; upon the meadow-level are grouped, in groves more or less dense, pines, cedars, and oaks, the latter often bearing large growths of mistletoe; upon the rock-talus, mingling with the pines and firs, the live-oak is a distinctive feature; higher, and clinging in crevices and to small patches of soil, the pungent bay and evergreen oak form patches of verdure. From the foot of Sentinel Fall an excellent view may be had of the meadows, the groves, the river, and the slopes at the foot of the walls of rock on either hand. On the right is El Capitan, three thousand three hundred feet high; on the left are the Cathedral Rocks, nearly two thousand seven hundred feet in height—the two forming what may be called the southern gate to the valley. Each of our illustrations, it is intended, shall present some characteristic feature of the valley. The opening cut was selected from many similar views at the upper end of the valley, where the pine-trees come down to the river's edge, and are mirrored in the still pools. Washington Column, more than two thousand feet high, stands out on the left, casting an afternoon shadow well up on the flank of the



Yosemite Fall and Merced River.

Half-dome, whose summit is almost five thousand feet above the river, or nine thousand feet above the sea. The distant view of the spires may serve to tell the story of the broad, tree-covered levels, so charming for scampers on horseback, and of the prisoning walls that are without suggestion of imprisonment. The spires are forms of splintered granite, about five hundred feet in height, and altogether not less than two thousand feet above the valley. Sentinel Rock combines more of picturesqueness and grandeur, perhaps, than any other rock-mass in the valley, its obelisk-like top reaching a height of over three thousand feet, the face-wall being almost vertical. The view from the north is taken from a point about midway between the foot of Yosemite Fall and Washington Column; the other is from a point as far south of it, presenting an entirely different aspect, its stupendous proportions dwarfing into littleness every thing at its base. The fall at the right, as shown in the illustration, exists only in the spring, as it depends entirely upon the melting snow for its supply. That its force and volume at times must be terrific, is evident from the gorge that it has hollowed at its foot. It is rarely that such exhibitions of destructive energy can be found. The climb up this water-torn gully ends all dreams of a well-ordered park below. Torrents pour into the valley as soon as the snow begins to melt, leaping the cliffs with indescribable fury, carrying immense rocks and great quantities of coarse granite-sand, to work destruction as they spread their burden over the level ground. In some places, this detritus has been deposited to the depth of several feet in a single spring. The air then is filled with the roaring of water-falls; the greater portion of the valley is overflowed; and the wayward Merced cuts for itself new channels, making wide waste in the change. At such times, the Yosemite Fall is described as grand beyond all power of expression. The summit of the upper fall is a little over two thousand six hundred feet above the valley; for fifteen hundred feet the descent is absolutely vertical, and the rock is like a wall of masonry. Before this, the fall of water sways and sweeps, yielding to the force of the fitful wind with a marvellous grace and endless variety of motion. For a moment it descends with continuous roar; in another instant it is caught, and, reversing its flight, rises upward in wreathing, eddying mists, finally fading out like a summer cloud. The full-page illustration is taken from a clump of pine-trees so near that, by the rapid foreshortening, the entire fall appears in very different proportions from those seen from the opposite side of the valley. Such a glimpse is given in the illustration "Indians bathing."

In the spring, water is an element of destruction, in freezing as well as in thawing. The little rills that filter and percolate into every crack and crevice of rock by day, as they freeze at night, enable the frost to ply its giant leverage; and, when disaster from water seems to threaten every thing, there is added the shock of falling cliffs. The granite-walls are not homogeneous in structure, some portions being far less durable, under the action of time and the elements, than others. The Half-dome and El

Indians making Chemuck.

Capitan are magnificent masses, at whose feet the *débris* are comparatively slight; but that part known as the Union Rocks, between the Cathedral and Sentinel Rocks, has suffered very much from disintegration. Great cliffs have fallen, and avalanches of rock have ploughed their way down the slope to the bottom of the valley. While climbing in such surroundings, the wreck of some world is suggested, so vast the ruin and so pigmy the climber. No words can convey other than a feeble impression of the effects of mountains of granite, sharp and fresh in fracture, piled one upon the other, the torn fragments of a forest underneath, or strewed about, as though the greatest had been but

Horse-Racing.

as straws tossed in the wind. A broad track of desolation leads away up to the heights from which these rocks have been thrown.

The attention may be diverted from cliffs and torrents to the human element characteristic of the place, poor though that element be, and in the change find much that is interesting in the few Indians that straggle, vagrant and worthless, through the region. They seem to be without tribal organization, although they still have "pow-wows," where their leading men, conscious of the inevitable decay of the race, strive to reorganize them and arouse their dying spirit; but the red-men are now hopelessly debauched and demoralized. In general appearance, they are robust, and even inclined to be fleshy; this latter is accounted for by the fact that acorns, their staple of food, are extremely fattening. There were at times as many as fifty Indians of all descriptions, male and female, old and young, living in the valley in the most primitive fashion, their "wallies," or huts, consisting only of branches stuck into the earth in semicircular form, the leaf-covered boughs meeting overhead. Generally they are dirty and disagreeable; but their voices are sweet, and their language is really musical. That some Indians do wash, I have had ocular demonstration; they are not all unqualifiedly dirty. While sitting at work on the river-bank, three young squaws came along and surprised me by deliberately preparing for a bath, not a hundred feet from me. They disported themselves with all the grace of mermaids, diving, swimming, and playing for nearly an hour in the cold snow-water. They stole a Chinaman's soap, and used it lavishly; and, making their fingers do duty as tooth-brushes, they showed a purpose of cleanliness as well as of sport. It was really a charming picture — the water so clearly transparent; the beach shelving in smooth slopes of sand; the trees overarching the stream; beyond all, the Yosemite Fall swaying in silvery showers, and, in the foreground pool, these children of Nature playing, their tawny skins wet with water and glistening with all the beauty of animated bronze. After their bath, they favored me with their company. One pulled from its place of concealment a Jew's-harp, and my ears were regaled with "Shoo, Fly!"

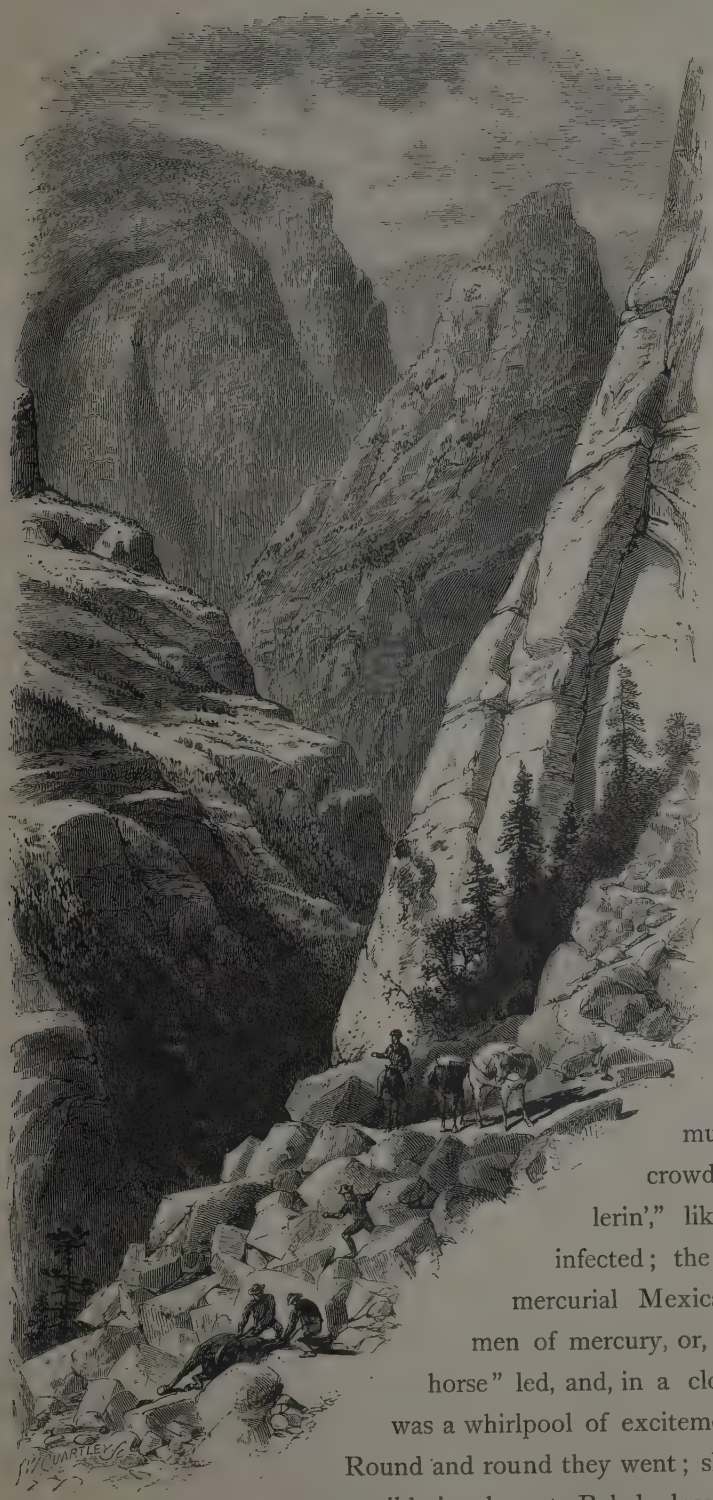
This particular bend of the river proved to be a place of regular Indian resort; for, on another day, within a few yards of my chosen ground, there was an encampment of not less than half a dozen squaws, more young ones, and yet more dogs. A fire was burning on the slope under the cottonwood-trees, and in it were a number of stones of small size. A circular basin, about three feet in diameter, and very shallow, had been carefully made in the fine sand, and into this acorn-flour was spread to the depth of three or four inches. The acorns are dried in the sun, hulled, and pounded between stones. By this rude process a very fine-looking, white flour is produced, but it is very bitter, and unfit for use until prepared. Conical baskets, of very fine osier, and filled with water, are made to stand securely by planting them in the sand. Into them hot stones are dropped, and in a few moments the strange spectacle is presented of a basket of water boiling violently. This scalding water is poured through cedar-boughs, held

fan-like over the flour, until the sand-basin is full; it drains rapidly through; the process is repeated several times, until, on tasting, the flour proves to be sweet, the bitterness having all been leached away. The pasty mess is then scooped with the hands into one of the large baskets, mixed very thin with water, and into this gruel hot stones are dropped until it boils; it is stirred and cooked until about the consistency of mush, then it is considered good to eat. Up to this stage I had been intently watching, and seemed to interest the savages quite as much as they interested me. One of them, with a very limited stock of English, was evidently quite willing to use it for my benefit. I was invited to join them as they squatted about a large basket of *chemuck*, as they call it, which I did very readily. In addition to the chemuck, they had cooked, by the aid of hot stones, a very bitter weed, steeped it in water until it was tasteless, and that was now brought to add cheer to the festive scene. The youngest and most cleanly-looking squaw sat next to me, and made herself very agreeable by her aboriginal pleasantry and savage politeness. The old squaws were dirty beyond measure; they grinned as they ejaculated their gutturals, and seemed as willing to be agreeable as the younger ones. They honored me especially with a separate basket, holding maybe a quart of their acorn-gruel. I was desirous of tasting their preparation, even after having noted that all the water used was from the river in which the half-dozen or so of little Indians were making commendable efforts to get clean, marked by an unwillingness to duck and dive anywhere but in the very pools from which the cooking-supplies were drawn. But my nerves were strong and my purpose was stout to share the hóspitality so kindly extended. The greens were put down by the chemuck, and the trial commenced by my red friend taking a quantity of the dripping greens, squeezing them dry in her hand, and offering them to me with pantomimic invitation to eat. With the quart of gruel in my lap and the squeezed greens in my hand, at the supreme moment I was any thing but hungry. They waited: I put the basket-bowl to my lips; they shook their heads, and their faces said that was not regular; my face asked what was the polite Indian manner. My kind friend promptly answered by first filling her mouth with greens, then dipping her four fingers into my gruel, ladling up a quantity, and then, with surprising quickness, transferring the half of her hand into her mouth. Further details are unnecessary. Up to this moment my stomach had remained passive; now it rebelled. I nibbled timidly at the greens, and dipped one finger into my chemuck. A shout warned me that that would never do, and again my red lady-friend set me an example, drawn from my private basket. I offered two, three fingers; they smiled derisively and shook their heads. The children and the dogs gathered around, and watched me with the wistfulness so peculiar to them. The situation was getting serious, so, with quick resolve and desperate energy, I plunged the half of my hand into the bowl; then, with a rapid twisting movement, tried to get it and the adhering gruel into my mouth. What a mess! Heart and stomach failed me, and my face told of complete discomfiture. With

YOSEMITE FALL.

one guttural grunt and a peculiar grimness of expression, the entertainers turned to help themselves with all the spirit and appetite so wanting in their guest. All dipping into one dish, it was an exciting race. The youngsters ladled out their share, and the dogs were not behind, enjoying, as they did, the advantages of direct communication, without the drawback of hands. What was not eaten at once of the chemuck was again cooked until very thick, then dipped out into a small basket, and turned into the cold water of the river, in such manner as to harden and take the form of old-fashioned "turnovers." They really looked inviting as they lay, white and rounded, in a pool at the river-side. In this form they are fit for use for a number of days. Chemuck is flat and tasteless; there is no salt used in cooking, but, to take its place, there is plenty of gritty sand. The sun went down behind Wa-haw-ka; the baskets and bread were gathered up, packed into the large cone baskets in which all loads are carried, strapped upon the backs of the oldest squaws, and they filed away, leaving their kitchen and banqueting-hall with no other trace of the day's work than the smouldering fire and the pits in the sand.

Hardly less nomadic or vagabond in character than the Indians were those rough fellows that found their way into the valley as mule-men, pedlers, and all those other nondescripts that are to be found hovering between the lines of civilization and the outer world of lawlessness. To such the grand excitement of the place was horse-racing, and the time invariably on Sunday. Any thing that looked like a horse might be a racer, and as great a tempest of excitement could be raised over a scrub of a mustang as though it were a thorough-bred. One Sunday morning I strolled to the upper end of the valley; a quiet like that of languor filled the air; the roar of the Yosemite Fall had died out, and now but a slender stream down the face of the cliff marked its place. In the hush I walked under the pine-trees, whose pendulous branches and long, tremulous needles vibrated into an Æolian melody upon the slightest provocation; a scarcely-perceptible breeze brought whispers, to be caught only by the attentive ear, that swelled through faultless crescendos into volumes of harmony, rich and deep, yet ever sounding strangely far away. From the shadows and music out to the sunlighted meadow was but a step. At the other extremity of the open space, four or five hundred yards away, was a group of men. Drawing nearer, it was plain to be seen that they were intent upon the preliminaries of a horse-race. There were Indians, Chinamen, Mexicans, negroes, and very dark-colored specimens of white men. There was a confusion of tongues, through which came the clear ring of clinking gold and silver coin, for all were betting —many of them their last dollar. Several horses were getting ready for the race; the favorites were a sorrel and a roan, or "blue horse;" all were very ordinary animals, and without the slightest training. There were no saddles; the riders, stripped of all superfluous clothing, bareheaded and barefooted, rode with only a sheepskin or bit of blanket under them; over the drawn-up knees and around the horse's body a surcingle was tightly drawn, binding horse and rider into one. Judges, starters, and umpires, were



Merced Gorge.

selected and positions taken. The word was given; the horses plunged, started, "bucked;" again they started; again the sorrel bucked. An unlimited amount of profanity expressed the impatience of the crowd. The "blue horse" was now largely the favorite.

"Now, boys, don't holler when the horses 's comin'—'cos you know the blue horse might fly the track — then whar's yer pile?"

"No! don't holler"—"we won't holler!" went up in one unanimous shout.

At last they came—a cloud of dust, rattling hoofs, and frantic riders plying their whips right and left over the struggling brutes under them; on they came; the squatting crowd sprang to their feet, and up went one simultaneous yell; on they came, the crowd capering, screaming, and "hollerin'," like so many madmen; all alike infected; the stoical Indian as well as the mercurial Mexican. "Now shet yer hollerin'," men of mercury, or, "whar's yer pile?" The "blue horse" led, and, in a cloud of dust, all dashed by. It was a whirlpool of excitement, the stake being the vortex. Round and round they went; shouts, laughter, and profanity—one wild, incoherent Babel—losers and winners alike indistinguishable. Their hot temperaments found the excitement they

craved, and the losers were rewarded in its drunkenness. Yet another very different interest is to be found in the visitors who throng the valley. Probably not less than two thousand come and go between May and October of each year, and, without exaggeration, they may be said to represent every nation and class of people on the globe. For their accommodation there are three hotels, where excellent fare is to be had, all the difficulties of getting supplies being taken into consideration. An enterprising individual has opened a saloon, with a display of cut-glass and silver that is quite dazzling. A great mule, staggering under the slate-beds of a billiard-table, carried the heaviest load that has yet been taken into the valley; and plans were laid, that by this time may have been realized, for sledding a piano over the winter snow, to be added to the establishment. Here, too, is the telegraph-office, where a single telegraphic wire connects with the outer world. A fifth house has been built, or perched, fourteen hundred feet above the valley-bottom, on the small rock-level between the Vernal and Nevada Falls. The proprietors of these establishments hold them subject to leases granted by the Yosemite commissioners. The same authority also appoints a guardian of the valley, whose duty it is to see that the rules for the preservation of the trees and the prevention of wanton defacement are properly enforced.

The scenic effects of winter are described as wonderfully beautiful, the ice-forms about the falls being particularly interesting. No doubt in time it will be the fashion to make winter-excursions into the Yosemite, but for the present it is safe to advise that, if the visit cannot be made in May or June, it be deferred until another season, for later in the year, to the disappointment of losing some of the finest features in the scenery, are added the discomforts of heat, toil, and an all-pervading dust, that penetrates to the innermost recesses of one's baggage and being. The temperature of spring is delightful, but during summer the thermometer frequently stands as high as 96° and 98°, while on the plains it is away above 100°.

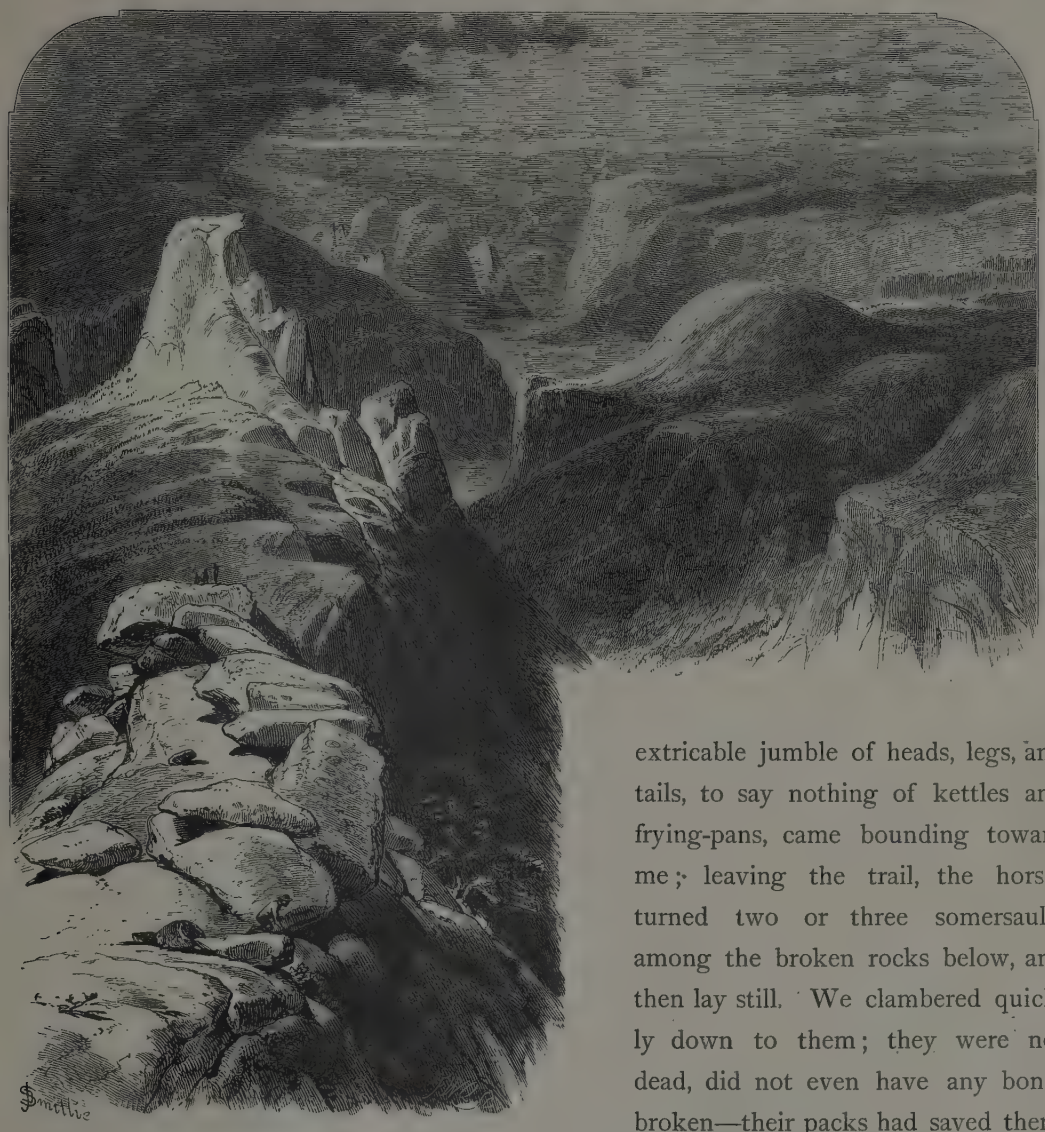
There are now no less than five trails over which a horse may get in or out of the valley: the Mariposa trail, passing Inspiration Point, and entering at the southern end; the Coulterville trail, that comes in at the same end, on the opposite side; a third trail, passing near Glacier Point, and entering at the foot of Sentinel Rock, about midway up the valley on its eastern side; a fourth one, passing through the Merced Gorge by the Vernal and Nevada Falls; and the fifth, through Indian Cañon, on the west side, north of Yosemite Fall. Over this last it is barely possible to get a horse, and it is very little used. On the Coulterville route travellers may ride in stages to the beginning of the descent, and at its foot may again take vehicles to the upper end of the valley—about four miles of level road—so reducing the horseback riding to but three miles. It is a mistake to think that the natural barriers—the walls surrounding—are impassable; there are many places where a bold climber could, without any great difficulty, surmount all obstacles.

The trail through Merced Gorge, after reaching the top of Nevada Fall, crosses the

TENAYA CANON, FROM GLACIER POINT.

stream and the southern end of the Little or Upper Yosemite Valley. This valley, more than two thousand feet above its famous neighbor, is one of the many great granite basins peculiar to this section of country. The bottom is a little more than three miles long, and is a pleasant succession of meadows and forests, through which flows the Merced River. The sides are not so much walls as smooth, bare slopes of seamless granite, ribboned with sienna brown bands from running water, and here and there breaking into those strange dome-forms so provocative of questions that as yet have received no answer.

Among our more extended excursions we planned one to this place, and, as we were to camp out for several days, our preparations were careful, and, on starting, our cavalcade was imposing. Five riders led; three pack-horses followed laden with hampers and blankets, each pack crowned with an inverted kettle or a broad frying-pan. After commencing the ascent, the way led through woods, close grown, and filled with a tangled undergrowth that, with all its rank vigor, was unable to overtop the great fragments of rock that strewed the forest. In places, the trail twisted from right to left in sharp zigzags, and was so exceedingly steep that the horse and rider upon the turn above seemed to be almost overhead. Within sight the river roared and tumbled in a series of cataracts. We left our horses under a great overhanging rock, in charge of the guide, to be taken up the trail to meet us farther on, while we climbed by a foot-path around the base of a magnificent cliff, and out, face to face with that beautiful sheet of falling water called the Vernal Fall. It is a curtain unbroken in its plunge of four hundred feet; on either side, the narrow gorge, drenched with spray and glimmering with rainbow-tints, is green with exuberant vegetable life. Climbing long ladders, we reached the top, to find a broad, basined rock and a lovely little lakelet sparkling in the sunlight. Farther on, we crossed a slender bridge, Wildcat Cataract flying underneath, just beyond which the little house already spoken of as between the Vernal and Nevada Falls found anchorage to the flat rock. Before us Nevada Fall came tumbling over a wall exceeding six hundred feet in height; to the right the Cap of Liberty, a singular form of granite, rose more than two thousand feet; all about were heights and depths, grand to look up to, terrible to look into. We had rejoined our guide and horses, and, passing through a clump of dark-looking firs that clustered at the foot of the Nevada Fall, we came out upon a slide of freshly-fractured, glistening granite that seemed impassable, but a way had been made, and up this avalanche of rock our horses betook themselves, climbing with wonderful pluck and sureness of foot. But one beast had shown a spirit of insubordination, so the guide had tied him close to a leader. At each angle of the zigzagging trail he would balk, refusing to follow; the other horse, keeping on regardless, pulled the obstinate creature into predicaments from which he could not extricate himself; then each pulled against the other, utterly indifferent as to consequences. In one of these contests the foothold of the leader gave way, and, in an instant, a confused mass of horse, an in-

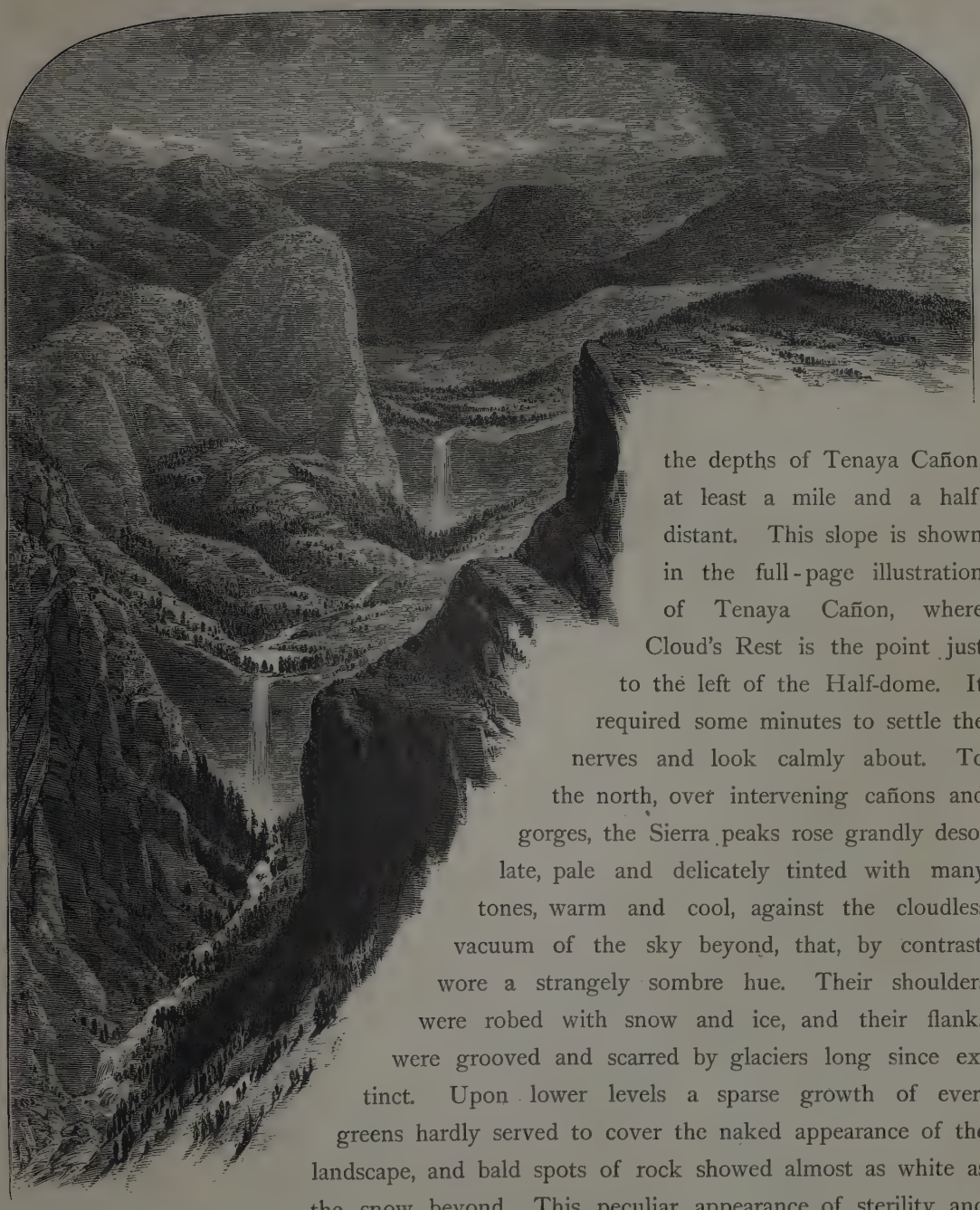


General View of Yosemite, from Summit of Cloud's Rest.

extricable jumble of heads, legs, and tails, to say nothing of kettles and frying-pans, came bounding toward me; leaving the trail, the horses turned two or three somersaults among the broken rocks below, and then lay still. We clambered quickly down to them; they were not dead, did not even have any bones broken—their packs had saved them. One, lying wedged, with his feet in the air, received our first attention; ropes and straps were cut, and three of us undertook to roll the beast out of his position. No sooner did we get him to where he could use his legs, than he made one vehement effort, and we were tossed like children. I remember seeing a bald head, followed by a full complement of arms and legs, fly past me, as though projected from a catapult; the guide seemed to sink out of sight, and something, that struck very much after the manner of a trip-hammer, spread me on my back. In an instant we were upon our feet, to find that the horse had fallen upon the guide, who was lying under him pinned to the rock. Things now were really serious. Should the horse again struggle, the man under him would probably suffer fatal injury, so, another coming to the rescue, one sprung to the horse's

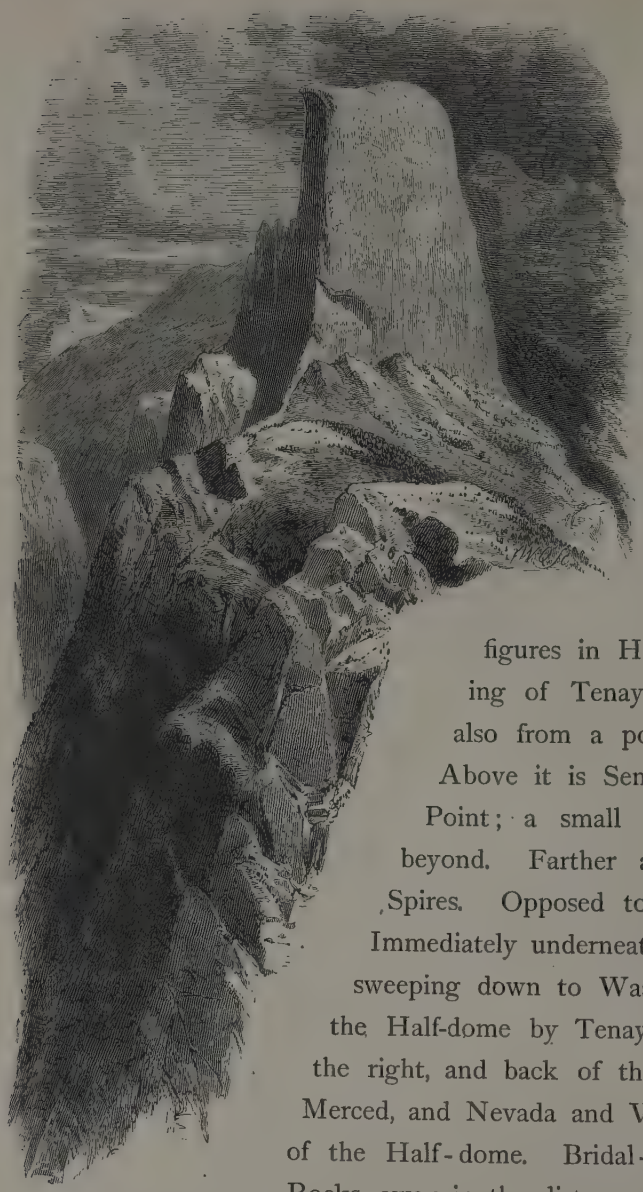
head, holding it firmly down, while the other two, getting under the beast, lifted him bodily until the guide was able to drag himself out with nothing worse than a severely-sprained ankle and a bruised leg. It is not at all surprising that getting the horses on the trail proved much more difficult than their getting off. While the packs were being adjusted upon other horses, for these could barely hobble along, I made a sketch of the scene, looking down the gorge. In the distance is a glimpse of the western wall of the Yosemite. Nearer, on the left, is Glacier Point, rounding up to Sentinel Dome. The form to the right, in the middle of the picture, is a point called Crinoline, Sugar-Loaf, Verdant, and several other names. It is a spur from the shoulder of the Half-dome. The rock that forms the right of the sketch is a portion of the base of the Cap of Liberty. Resuming our way, we reached the upper valley late in the afternoon, and found an ingeniously-constructed, evergreen brush-house ready for us. It was short work to unpack and unsaddle our horses, turn them loose, gather wood, light a fire, and prepare our evening meal. During preliminary proceedings the two ladies of our party were engaged making gay and home-like the interior of our hut. Bright-colored blankets were spread with an eye critical to effect, and the heavy Mexican saddles made capital lounges and pillows. A stroll in twilight, until it deepened into moonlight, completed the day. In spite of all our precautions, the first night was really uncomfortable, owing to the cold; in the morning a gray rime of frost covered every thing; we were camping at an elevation greater than the summit of Mount Washington.

From camp we made an excursion to the top of Cloud's Rest, a point of view that surpasses all others in its comprehensiveness, as it rises at least six thousand feet above the Yosemite, or ten thousand above the sea. Starting after an early breakfast, we rode for an hour or two through open and scattered woods, climbing rapidly. Not very far from the summit we entered a remarkable grove of sugar-pines, through which ran a small stream, where grass grew abundantly. We took our horses to within a few hundred yards of the summit, after cantering over a waste of disintegrating granite, upon which stood, at wide intervals, strangely grotesque pines, gaunt of limb and thick-bodied, rigid and tendonous. Their branches were awry, as if suddenly stayed while wrestling for life against the storm, and their olive-brown verdure had no vital, sappy green to refresh the eye. Upon the blinding whiteness of the rock and sand were traced, in severe lines, shadows more wild and weird even than the real forms, and over all stretched a vault of "dusky violet," completing a picture almost without suggestion of our familiar world of beauty. Here we left our horses and climbed to the top, which proved to be a long, thin, wave-like crest of granite, very narrow and piled with loose blocks that looked so insecure that it required steady nerves to walk its length, which in places was not more than ten or twelve feet wide. On the east side the descent was a steep sweep for hundreds of feet; on the west it was thousands. It fell away in one unbroken surface of granite, at an angle of not less than 45°, with no obstacle to stay a falling body until it should reach



Gorge of the Merced, from Glacier Point Trail.

the depths of Tenaya Cañon, at least a mile and a half distant. This slope is shown in the full-page illustration of Tenaya Cañon, where Cloud's Rest is the point just to the left of the Half-dome. It required some minutes to settle the nerves and look calmly about. To the north, over intervening cañons and gorges, the Sierra peaks rose grandly desolate, pale and delicately tinted with many tones, warm and cool, against the cloudless vacuum of the sky beyond, that, by contrast, wore a strangely sombre hue. Their shoulders were robed with snow and ice, and their flanks were grooved and scarred by glaciers long since extinct. Upon lower levels a sparse growth of evergreens hardly served to cover the naked appearance of the landscape, and bald spots of rock showed almost as white as the snow beyond. This peculiar appearance of sterility, and meagre, patchy forest-growth, characterizes all the surrounding country when seen from such a height. Turning from the Sierras, that were from three to five thousand feet above our level, we looked down six thousand feet into the Yosemite, whose peculiar, trough-like formation was readily recognizable, running almost at right angles to the regular trend of the mountains, and fully four thousand feet below the average level of the surrounding country. The familiar



Half-dome.

forms of the enclosing walls, and the green groves and meadows of the valley-floor upon which the Merced sparkled, could be plainly seen, but angles of rock hid each water-fall.

No one can really claim to have seen the best general view of the Yosemite until he has climbed Cloud's Rest. In the illustration (p. 491) the form on the left, in light, is the Half-dome, of which views from different positions are presented: first, in the opening picture; again, rising behind the figures in Horse-Racing; in the full-page engraving of Tenaya Cañon; from Glacier Point, and also from a point farther east, given on this page. Above it is Sentinel Dome, sloping down to Glacier Point; a small bit of Sentinel Rock projects just beyond. Farther away are the Cathedral Rocks and Spires. Opposed to them, on the right, is El Capitan. Immediately underneath, in the picture, is the North Dome, sweeping down to Washington Column, and separated from the Half-dome by Tenaya Cañon. The Yosemite Fall is to the right, and back of the North Dome. The Gorge of the Merced, and Nevada and Vernal Falls, are to the left, and back of the Half-dome. Bridal-veil Fall is back of the Cathedral Rocks, away in the distance.

After a day or two we broke camp, and, by a new trail, over which we were the first to pass, made a *détour*, keeping along the upper edge of the Merced Gorge, crossing the Too-lulu-wack a few hundred yards above its fall, and thence to Glacier Point. This is one of the most interesting rides about the valley, presenting many grand and even startling views. From one point we could look down into what seemed a bottomless abyss, for it was impossible to see its greatest depth. Out of it came the roaring of distant waters and the lulling song of pine-tree forests. The Too-lulu-wack Fall was almost under us, and could not be seen; but on the opposite side were the Vernal and Nevada Falls and the many cataracts of the Merced that, unlike most of the other streams that enter the Yosemite, are very imposing all the year round.

The Cap of Liberty rose prominently in the centre; back of that the upper Yosemite opened, and beyond all were the snow-capped High Sierras. In the engraving of this view, the peculiar rock-form and character of the upper valley walls or slopes have been quite lost. Passing on, we soon reached Glacier Point. At its northern end the Yosemite Valley divides in the form of a Y, Tenaya Cañon forming the left arm, and the Merced Gorge the right. Again, the Merced Gorge is divided like a T, the Merced entering on the left, the Too-lulu-wack on the right. Glacier Point is a spur of rock or mountain jutting out on the west or right-hand side of the valley, where it divides. From its terraced summit we looked down thirty-two hundred feet to the meadows at our very feet. Few can gaze into such a depth without a shudder. Directly opposite, on the other side, perhaps a mile and a half away, the Yosemite Fall came down half a mile in three leaps, its truly graceful proportions seen to greater advantage than from any other point. To the right, or north, we looked up Tenaya Cañon, its narrow floor beautiful with tall pines that almost hid its one jewel, Mirror Lake; but with walls grim and vast that swept on the right up five thousand feet to the grand, dominating form of the valley, the Half-dome. The bald slope and crest of Cloud's Rest towered beyond, and back of all the Sierras lifted their peaks, as yet untrodden by the foot of man. There can be but few places where so much of the terrible and the beautiful are at once combined.

From Glacier Point a trail leads to the summit of Sentinel Dome. Upon this height we spent an hour or more, enjoying already familiar features as viewed from a new stand-point. The ride thence to Paregoy's, distant about six miles, was through heavy forest. From Paregoy's we, brothers of the brush, returned to our old quarters in the valley, and worked hard for two months to bring away some limned shadow, however faint, of the wonders about us. At last our work was done, and our traps were packed for departure. Familiar with horses, pack-mules, and trails, we were independent of guides. The valley was filled with morning shadows when we started on our way. I led, dragging after me an extremely recusant pack-mule, that was pricked into conformity by G——, who followed, armed with a formidable stick, at least six feet long. Between our horses, the mule, and "last looks," much time was consumed, but Paregoy's was reached before one o'clock, and the late afternoon was spent trying to get a study of evening tints over the Sierras. The colorless granite is singularly responsive to certain atmospheric effects. Against a background of storm-cloud their forms stand wan and ghost-like; in the blinding glare of the mid-day sun they faint, almost indistinguishable; and, at sunset, they glow with a ruddy light, that is slowly extinguished by the upcreeping shadows of night, until the highest point flames for one moment, then dies, ashy pale, under the glory that is lifted to the sky above. Then the cold moon tips with silver those giant, sleeping forms, and by its growing light I cleared my palette, and closed the box upon my last study of the Yosemite and Sierras.

PROVIDENCE AND VICINITY.

WITH ILLUSTRATIONS BY WILLIAM H. GIBSON.

IN the year 1635, the Massachusetts Bay Company thought it necessary to banish Roger Williams, then a minister at Salem, out of their jurisdiction, as his views of Church government, and fantastic notions about freedom of conscience and religious liberty, were regarded as unscriptural and dangerous. The exiled man found his way on foot to the Seekonk Plains, where he passed the winter with the Indians, whose steadfast friend and protector he remained to the end of his life. Late in the following spring, or early in the summer, he, with five companions, crossed the Seekonk River in a log-canoe, and landed on what is now known as Slate Rock, on the eastern boundary of Providence. The Narragansetts were at this time the most numerous and powerful tribe of Indians in New England; and it is the tradition that a group of these aborigines, who from a neighboring hillock had been watching the approach of the new-comer, saluted him on his arrival with the friendly greeting, "What cheer!"—words which have been perpetuated in Rhode Island in the titles of banks, public buildings, and various societies and institutions.

Williams, with his associates, at once proceeded to establish a settlement, about one

mile to the northwest of the spot where he landed, around which a population gradually collected, representing great varieties of opinion, and who, for the most part, wished for liberty to think as they pleased, and also to give free utterance to their sentiments, without fear or molestation. For nearly a century there were but few persons of eminence or wealth in the town, most of the people being engaged in husbandry and handicraft. This explains the fact that no buildings, public or private, appear to have been erected with any other than perishable material, or with any pretensions to architectural beauty, the rickety structure designated as the "Old Homestead" in our pictorial illustrations being a fair specimen of the only relics that remain of our more ancient houses.

From this humble beginning, Providence has come to take rank as the second city in New England for size, numbering, in 1873, about eighty thousand inhabitants. It is also proportionally one of the wealthiest cities in the land, and is surpassed by none in the variety of employments which occupy the

City of Providence, from Southern Suburbs.

people. Almost every thing is manufactured here—cotton goods and woollen cloths, castings and machinery of all descriptions, guns, locomotives, tools, steam-engines, and sewing-machines; jewelry, cheap and costly, the finest gold chains being made by machines that turn out some hundreds of feet in a day; tortoise-shell work that finds its way into all parts of the world; silver-ware, unsurpassed in beauty of design and delicacy of workmanship; cotton-seed oil and pea-nut oil that pass at the hotels, and sometimes at private tables, as genuine *olive;* patent medicines that cure or kill in all nations; cocoa-nut dippers by the ship-load; and, above all, *screws* that have driven all others out of the market, and yield a profit to the stockholders of five or six hundred per cent. on their original investment. All the mills in and about the city may not be as picturesque as that which our artist has copied; but, with few exceptions, they are of substantial material, and their size gives to them a degree of grandeur.

The foreign commerce, which imparted to the town its first impulse, has nearly died out; but the harbor is crowded with vessels, laden with timber and coal, and lines of ocean-steamers have been established of late, which bring this port into direct communication with the most important cities on our coasts.

The general lay of the land is such that no one picture can give a fair idea of the size and extent of the city, and the variety of hill and hollow brings the tops of the steeples in one quarter on a line with the lower windows of houses set upon the higher streets. From certain points of view, the buildings look as if they had been *inserted* into the sides of the hill, and some of the streets are so steep that railings have been placed on both sides to aid the pedestrian in his ascent and descent. In one or two cases, the passage of vehicles is arrested by a flight of stone steps, extending the entire width of the road. It is now proposed to tunnel the loftiest of these elevations, and thus bring the eastern and western portions of the city into easier communication.

Providence indicates, in its peculiar name, the spirit in which it was founded, and there are few places where the cardinal virtues and higher emotions are signalized in the titles of the thoroughfares as conspicuously as they are here. Thus we have Benevolent Street, Benefit Street, Faith Street, Happy Street, Hope Street, Joy Street, and others of like sort. Amsterdam is perhaps the only city that can go beyond this in the quaintness of the names by which the streets are designated.

There are more *wooden* buildings in Providence than can be found in any other place in the United States. One may travel over large districts of the city without seeing a house of stone or brick. At the same time, it may be noted that the proportion of beautiful and stately mansions, many of which are built of stable material, is uncommonly great; and these private dwelling-houses are often surrounded by spacious and cultivated grounds, filled with flowers and shaded by ornamental trees. Until a comparatively recent date, the humbler sort of dwellings were constructed after a very

uniform model, and that an exceedingly commonplace design. The same thing may be said of most of our older New-England towns, and it would sometimes seem as though an effort had been made to avoid every feature in their architecture that is seemly and picturesque. Our people are now beginning to see that an inexpensive and humble dwelling may be made attractive by a symmetrical arrangement of lines and a proper adjustment of the roof, and such trifling adornments as add very little to the cost and require no great amount of skill in their construction. As might be expected, while we are passing through the transition period from bald ugliness to grace and

The "Abbott House."

beauty, absurd and ambitious monstrosities are perpetrated, from which the cultivated eye turns away in disgust—pillars that look like an old-fashioned bedpost magnified, supporting a huge portico altogether out of proportion to the house; bits of Egyptian, and Grecian, and Saracenic, and Gothic, put together in awful defiance of all the rules of art, with combinations of incongruous coloring that make one shudder. But, before long, we shall be rid of these abominations; and, as men go to a good tailor when they want a good coat, so they will learn to call upon a real architect, who understands his business, when they would build a good house.

What is known as the "Abbott House" is an ancient structure, in which Roger

Williams is said to have held his prayer-meetings. It was erected by Samuel Whipple, one of the early settlers of Providence Plantations, and who was the first person buried in the old North Burying-ground. This house must be more than two centuries old, and it is the only structure in the State of which any fragment remains in any way identified with the memory of Williams.

If the sketch of Westminster Street had been extended to take in a longer range, one striking peculiarity of Providence would have been seen—and that is the singular mixture, in the business portions of the city, of ancient dwelling-houses, now converted into shops; temporary structures of wood, not more than ten or fifteen feet in height, which pay an annual rental about equal to their original cost; and lofty structures of brick, and stone, and iron, as costly and magnificent as can be found in any city of the Union. One such building has just been erected by Mr. Alexander Duncan, and known as the Butler Exchange, the proportions of which are colossal; and it is a model of beauty, as it is of practical convenience.

It is not altogether creditable to the city that there is no *civic* building of any description that deserves notice. The old State-House is an unpretending structure, inconvenient and entirely inadequate for the various uses to which it is devoted, and with no pretension to elegance. Measures, however, have been taken with a view to the speedy erection of a new edifice, which, it is to be hoped, will fairly represent the wealth and culture of the city and the State. The City-Hall is an old market-house, from which the stalls were excluded to make room for the municipal authorities, and consists of four plain brick-walls, with a roof above, and is a disgrace to the town. It is somewhat strange that, in a city which abounds in splendid private residences, there should never have been enough public spirit to erect a respectable civic edifice, or to build an hotel that is worthy of the name.

The ecclesiastical architecture of Providence is of a mixed character, some of the churches being plain and ugly, some approximating so nearly to a correct standard that one cannot help mourning over their incidental defects and spindling spires, while others are decidedly correct and somewhat impressive in their architecture.

The First Baptist Meeting-House, of which we have a sketch under the title of "The Old Landmark," was erected in 1774–'75, and is eighty feet square, with a spire a hundred and ninety-six feet high. The exterior has remained unaltered from the beginning, and presents a pleasing and picturesque appearance. The steeple is copied from one of Sir Christopher Wren's churches in London, and is singularly symmetrical and beautiful. The edifice stands in an open square, on the side of a hill, and is surrounded by trees. The society that worships here was founded by Roger Williams, on his arrival in Providence, and claims to be the oldest church of the Baptist denomination in America. Mr. Williams, however, continued to be its pastor for only four years, when he withdrew, not only from his official relations, but also ceased any longer to worship

SCENES IN PROVIDENCE

with his brethren, having come to the conclusion that there is "no regularly-constituted Church on earth, nor any person authorized to administer any Church ordinance; nor could there be, until new apostles were sent by the great Head of the Church, for whose coming he was seeking." During his time, and for many years after, public services were held in a grove, excepting in stormy weather, when the people assembled in a private house for worship. The first meeting-house was built about the year 1700, at the expense of Pardon Tillinghast, the pastor, who at his death bequeathed the property to the parish. In 1726, a new and larger house was erected, and the record of the great dinner given on this occasion indicates a degree of frugality in striking contrast to

Whipple's Bridge on Blackstone River.

the lavish expenditure of our times. The bill-of-fare consists of one sheep, one pound of butter, two loaves of bread, and half a peck of peas—total cost, twenty-seven shillings. The bell which was originally hung in the tower of the present church bore this inscription:

"For freedom of conscience, the town was first planted;
Persuasion, not force, was used by the people.
This church is the eldest, and has not recanted,
Enjoying and granting bell, temple, and steeple."

In the course of a few years this bell was destroyed, and that which was substituted in its place gave such offence to the public that an attempt was made to break it with

MILLS ON BLACKSTONE RIVER.

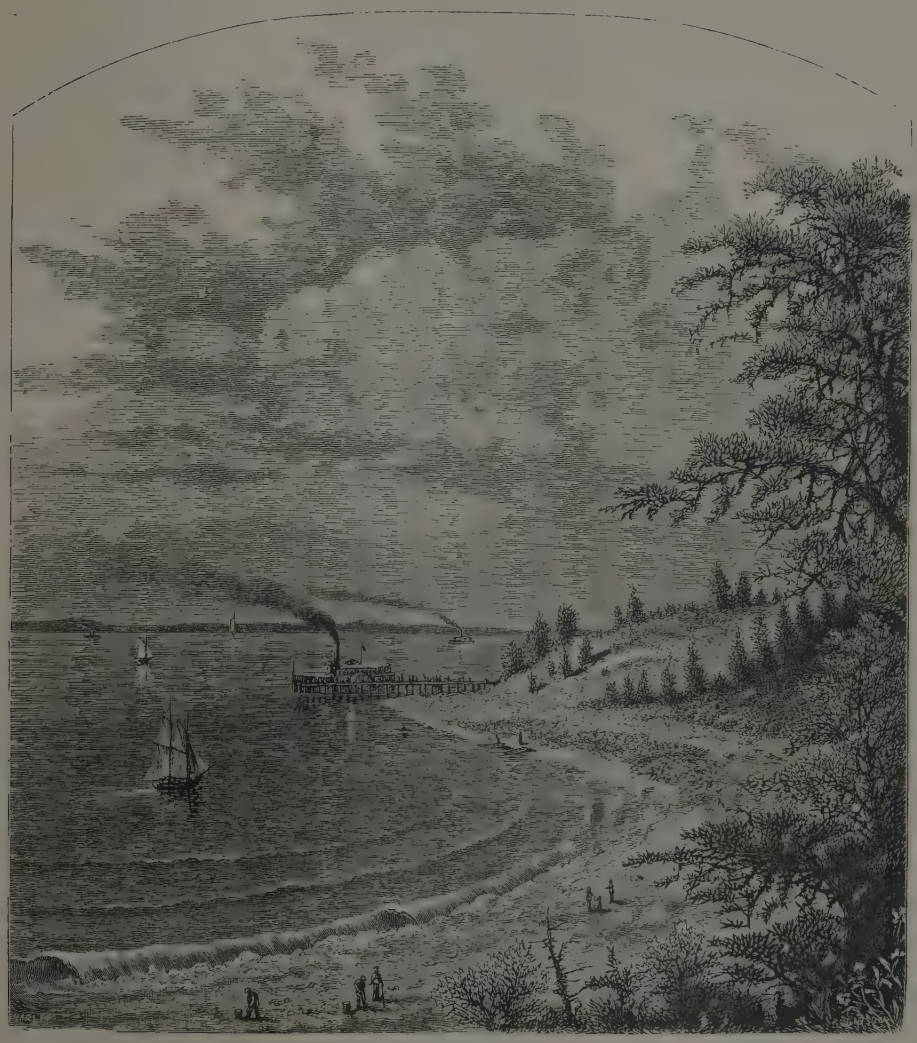
a sledge-hammer, which, however, resulted only in knocking off a small chip from the edge. This may have resulted in restoring the right tone to the bell, for it continues to ring the hour of noon and the nine-o'clock vespers down to the present day, and is thought to be pleasant and musical.

Grace Church, of which we have a sketch in the picture of Westminster Street, was built in 1845, of brown-stone, after a plan furnished by Mr. Richard Upjohn, and is seventy-seven feet broad and a hundred and forty-seven feet in length. At the time of its erection it was regarded as one of the finest churches in New England; and, in solidity of construction and beauty of proportion, it is even now surpassed by few ecclesiastical structures.

We should exceed our limits if we undertook to describe other church edifices in Providence which are worthy of being noted; and therefore we pass at once to speak of the State Hospital, a distant view of which may be seen in an accompanying illustration. This noble structure stands on an elevation of about seventy feet above the sea, open to the breezes of the bay, and commanding a beautiful and extended prospect. The area which surrounds the buildings covers twelve acres; and its graceful undulations of surface, shaded walks, lofty trees, and artistic shrubbery, reflected in a miniature lake, combine to make it one of the most attractive spots within the circuit of the city. It was erected entirely by private munificence, not less than five hundred and forty-seven thousand dollars having been already contributed for building-expenses and endowments, and an expenditure of forty thousand more will be needed to complete the interior. "For the beauty of the exterior of the buildings we are indebted to the taste and talent of A. C. Morse, Esq., architect—not merely for the fineness of proportion and nobleness of effect, but for the admirable combinations of color and the skilful employment of the architectural material that New England produces. In this part of the world Nature has not been bountiful in the variety of building-material she affords. The everlasting but intractable granite is almost our only stone; bricks of excellent quality and of superior color constitute our chief means of durable building; a small quantity of red sandstone is furnished by the quarries of Connecticut. These three substances have been employed by our architect almost in the proportion that is here indicated —with what admirable and novel effect, we leave to the appreciation of every beholder. The style is a pure example of Italian Gothic; no more perfect specimen of this style can be found even in the old cities of Northern Italy, where, being confined to the same materials, the ancient Italian architects carried their use to such a degree of perfection that modern architects from all countries resort for the study of their art to the cities of Modena, Pavia, Mantua, and Verona." A careful inspection was made of the best hospitals in this country and abroad, before the plans for the interior were adopted; and in every respect this institution represents the most advanced improvements in construction, and is a model of completeness and excellence. The main front

extends a little more than four hundred feet. In the month of October, 1868, the hospital was opened with appropriate ceremonies, and is now filled with patients to its utmost capacity.

The Soldiers and Sailors' Monument stands in an open square adjoining the railroad-station, and was erected in 1871, in accordance with a vote of the State Legisla-



Mark-Rock Landing.

ture, at a cost of about sixty thousand dollars. It was modelled by Mr. Randolph Rogers, in Rome; and the castings were made in Munich, under his direction. From the level of the ground to the top of the monument it is forty-six feet, and the general appearance of the structure is very imposing. It is surmounted by a female figure in bronze, eleven feet high, representing America at the close of the late war. The left

hand is resting on a sword, and holding a wreath of *immortelles;* and the right hand, extending, holds a wreath of laurels, as if to crown the heroes of the war. The figure is draped in classic robes, hanging easily and naturally around the form. The face is benign, and full of expression. Beneath the plinth upon which the statue stands are stars and wreaths of oak and laurel in bronze. Upon the face of the next section are the arms of the State of Rhode Island, while in the rear are the arms of the United States. On the angles are fasces, indicating that in union there is strength. On the next section, at the front, are the dedication words: "Erected by the people of the State of Rhode Island to the memory of the brave men who died that their country might live." Upon the next section stand four bronze figures, seven feet and three inches in height, representing the infantry, cavalry, artillery, and navy. They are clad in appropriate uniforms, and bear the arms and insignia of their several departments of service. Four bronze *bassi-rilievi*, size of life, appear upon the next section, representing War, Victory, Emancipation, and Peace. War appears with sword and shield, Victory as an angel bearing the sword and palm, Emancipation as a freed-woman with broken chains, and Peace with the olive-branch and horn of plenty. On the projecting abutments are twelve panels, containing bronze tablets on which are engraved the names of the heroic dead—in all, seventeen hundred and forty-one. There are few commemorative columns in the country as thoroughly artistic as this.

We now pass to the outskirts of Providence, in a northwesterly direction, and, as we drive through a small manufacturing settlement, we come upon a little, double-arched bridge, where we can get a fair idea of the general style of scenery which is peculiar to the region. It has no startling features, no striking contrasts in the landscape, no mountains, no bold horizon, but there are pleasant walks by the side of running streams, shady nooks and alcoves in the woods, with an occasional glimpse of the distant waters of the bay, which gives a cheerful life to a picture that would otherwise be somewhat tame and monotonous. The territory of this State is so limited, and what there is appears on the map to be so intersected by water, that people sometimes smile when we speak of the *interior* of Rhode Island, as if it must be all border, and still it is possible for one to drive a score or two of miles, in a straight line, without getting outside the limits.

But, apart from the regions which border upon Narragansett Bay and the ocean, there are few features in the landscape that would arrest the artist's attention. The broad sheet of water which opens directly south of Providence, and stretches for thirty miles down to the Atlantic, constitutes the great attraction of this Commonwealth. The rivers emptying into the bay, whose falling waters are used over and over again to propel the great wheels of our manufactories, are the main source of the marvellous riches of the State; while hundreds of thousands are drawn every year to the summer resorts which line the shores and adorn the islands of Narragansett Bay.

The sketch of Mark Rock Landing, with the steamer touching at the wharf, might be repeated almost indefinitely. For miles and miles on both sides of the bay, places of resort for summer visitors have been established; while the towns of Pawtuxet, East Greenwich, Warwick, Wickford, and Kingston, on the western shore, and Nayatt, Barrington, Warren, Bristol, Portsmouth, Middletown, and the world-renowned Newport, furnish salubrious and attractive residences for permanent as well as for temporary domicil. Let us linger for a while at Rocky Point, on Warwick Neck, about twelve miles south of Providence, and see what it is which attracts such multitudes to this spot. When we are told that, in the summer of 1872, not fewer than two hundred thousand persons landed here — there being more than twelve thousand visitors in a single day — and that steamboats, crowded to repletion with passengers, deposit their burdens here eight times every day; that one of the several dining-rooms connected with the hotel covers a space of

Rocky Point, from Warwick Pier.

Break-water, Narragansett Pier.

eighteen thousand square feet, and can seat fifteen hundred persons, while, in the height of the season, notwithstanding these liberal accommodations, many are sent hungry away, we may be certain that the place possesses some very peculiar attractions. Shady groves, pleasant walks, romantic caverns, a smooth beach, salubrious air, and beautiful views, are among the natural features which attract the weary and the seekers after pleasure and repose. From the high tower which appears in our artist's sketch, the whole bay, from Providence to Newport, with the Atlantic in the distance, comes within the reach of the observer's eye. All the resources of art have been levied upon to increase the attractiveness of the place—fountains within-doors, and others discharging their jets into basins in the open air; beds of flowers, and rustic flower-baskets and evergreens, set off with artificial floral decorations; ruins covered with running vines, and fish-ponds glittering with varieties of the most beautiful fish, to which is about to be added another pond for seals, and a deer-park.

But, after all, the great feature of the place is the *clam-bake*, an institution of which Rhode-Islanders are proud, and regard as a connecting link that binds them to the old Narragansetts, with whom it originated. The culinary process may be briefly described: A fire of wood is built in the open air, upon a layer of large stones, arranged in a circular form, and, when they have become sufficiently heated, the embers and ashes are swept off, and a quantity of clams in the shell poured upon the stones, which are immediately covered with a thick layer of fresh sea-weed, and this is also protected from the cooling effects of the atmosphere by an old sail-cloth. In due time the coverings are removed and the feasting begins. Thousands of bushels of clams are thus consumed at Rocky Point during every season, and where they all come from is a mystery, for the neighboring shores are so constantly dug over that there would seem to be little chance for the infant shell-fish to attain maturity.

Passing down the west passage of the bay and reaching the open sea, we come upon Narragansett Pier, where the broad ocean rolls in full force, and there is no land that can be reached in an easterly line until we touch the shores of Spain. The structure from which the region takes its name, and the ruins of which may be seen in the picture, was erected a few years since, at considerable cost, of heavy blocks of granite, clamped together with iron bolts. The curve of the wall made a small harbor within, where vessels might lie and discharge their cargoes, without the danger of being destroyed by the winds and waves. It was presumed that this massive pile of rock would be strong enough to defy the power of the ocean, but the first heavy storm gave it a blow from which it never recovered, and successive tempests have torn away the iron clamps and tumbled the huge stones into a heap of ruins.

Until a comparatively recent date this place was a waste, and occupied only by a few fishermen's houses, but a strange change has now come over the scene. A thousand bathers may be seen, on a warm summer day, crowding the beach that was once so still and solitary; and not fewer than eighteen hotels and boarding-houses have been erected along the shore, some of them elegant and costly and of vast dimensions. People from all parts of the Union flock to this spot, for the sake of breathing the cool ocean-air, and plunging in the waves, and watching the breakers, as they dash upon the high, precipitous rocks that line the shore, at a little distance south of the smooth, hard beach where the bathing is done. Artists say there are no rocks on our coasts so rich and varied in their coloring as these—south of this ledge there are, indeed, no rocks at all on the American shore, until you reach the reef of Florida. "Indian Rock," of which we give a view on steel, from a painting by Hazeltine, is named from an old tradition, which declares there are red stains of Indian blood upon it, which the waves have never been able to wash off—a story almost as well founded as many other aboriginal legends.

THE SOUTH SHORE OF LAKE ERIE.

WITH ILLUSTRATIONS BY J. DOUGLAS WOODWARD.

Erie Canal Basin and Elevator, Buffalo.

AMONG the five great lakes of the Western chain, Erie occupies the fourth place as regards size, the last place in point of beauty, and no place at all in romance. Lakes have their natures as distinctly marked as the human children who tread their shores. One child is imaginative, and the brother next in age has a deadly-practical mind; one sister is beautiful, and another without a charm; the children of the same parents grow up as different as though born in the four different quarters of the earth, and yet the influences around them are the same. In like manner, the sister-lakes, join-

ing hands from Minnesota to the ocean, have their distinct characteristics; each, in turn, comes to the front with her one superlative adjective, whose fitness cannot be questioned, but whose rank in the scale varies according to the temperament of the traveller, as, with guide-book in hand and glasses slung from his shoulder, he stands on the narrow forward deck of the propeller whose sharp bows point toward Chicago or Duluth. Thus, grand Superior is the most mysterious of the lakes, its northern shores even now but half explored, strange tales of its gold and silver, amethysts and rubies, tin and copper, being brought down by the fur-traders and hunters to old Fort William and the Sault. Thus, sea-green Michigan is the most beautiful of the lakes, with its islands, its shifting silver fogs, its long Green Bay, and the unsurpassed Straits of Mackinac. Thus, blue Huron is the most romantic of the chain. It has no towns to bring one back to reality; the steamer glides northward without the prosaic unloading of freight, and, if it stops at all, it is at some little log-wharf, where the wild-looking lumber-men bring down

Ship-Canal, Buffalo.

their loads of wood, with shouts and rough cries, while the passengers wander into the primitive forest of the New World to gather the hardy blue-bells and Indian pipes, or stroll along the beach, searching for veined agates. An atmosphere of romance rests over Lake Huron; its depth, its color, and its wild solitude, bring to the surface all the latent poetry in the tourist's heart; and the same man who sleeps through Ontario, talks "iron" on Superior, "grain" on Michigan, and "oil" on Erie, will surprise you with sentiment on Saginaw's landless expanse, and verses off the blue headland of Thunder Bay. Poor Ontario is crushed by Niagara Falls; if the lake is seen first, its placid memory is effaced by the great cataract, and, if afterward, eyes wearied with admiration generally sleep over its gray waters, and only waken for the thousand islands of the St. Lawrence. Yet Ontario has its adjective, and is not without its partisans, for it is unquestionably the safest of the chain.

Brown Erie has now its turn. It possesses the most historical interest. It has relics, antiquities, the memory of many battles on land, and one important naval engagement on its waters. From old Fort Schlosser, on the Niagara River, in the east, to the ancient post on the Detroit, in the west, the shores of Erie are full of interest to the future historian of the lake-country. They wait for his coming; their waves hide the sunken timbers of British vessels; their banks hold in store for him the rusty swords and muskets of the days before the Revolution; their sand-beaches cover cannon and *bateaux;* and their rocks preserve the inscriptions of the lost tribe of Eries, driven in a day from the face of the earth by the fierce Iroquois, as long ago as 1665. The lake has its heroes, also, and its sayings, famous all over the land. Pontiac's spirit haunts the mouth of the lovely Detroit River; Tecumseh flits through the woods on shore; the name of Perry is associated with the western islands; and the memory of mad Anthony Wayne hangs over Presque Isle, now Erie. It was on the Detroit River that Logan died—Logan, whose sad words are well known in every school-house in the land: "There runs not a drop of my blood in the veins of any human creature. Who is there to mourn for Logan? Not one." It was on the north shore of Lake Erie, at the head of his little band, that Tecumseh stood, and, waving his hand over the lake, spoke to the British general, his ally: "If you wish to retreat, give us arms; and you may go, and welcome. As for us, our lives are in the hands of the Great Spirit; we will defend our lands to the last, and, if it be his will, we will leave our bones upon this shore." It was at Put-in-Bay, among the Lake-Erie islands, that Commodore Perry wrote his famous dispatch: "We have met the enemy, and they are ours." At Presque Isle died mad Anthony, whose field-order is as laconic as General Dix's "Shoot him on the spot." Before the battle of Fallen Timbers, in 1794, not far from the present city of Toledo, General Harrison, then aide to Wayne, addressed his superior: "General Wayne, I am afraid you will get into the fight yourself, and forget to give me the necessary field-orders." "Perhaps I may," replied mad Anthony—"perhaps I may; and, if I do, recol-

MAIN STREET, BUFFALO, FROM ST PAUL'S CHURCH.

Grain-Propeller, Buffalo.

lect that the standing order for the day is, Charge the d—d rascals with the bayonets!"

Lake Erie is two hundred and fifty miles long, sixty miles broad, and two hundred and four feet at its greatest depth, although, on an average, it is not more than ninety feet deep. Compared with the other lakes, it is shallow; and the difference has been described as follows: "The surplus waters poured from the vast *basins* of Superior, Michigan, and Huron, flow across the *plate* of Erie into the deep *bowl* of Ontario." Lake Erie is the only member of the chain which is reputed to have any current. The current, if there is one, is probably owing to its shallow bed, and the great force of its outlet, the Niagara River. But it has another reputation, which is founded on certainty; it is the most dangerous of the fresh-water seas. Its waves are short and chopping, its harbors insecure, especially along the northern shore, and it has little sea-room. The mouths of its streams are clogged with sand-bars; and in the early days, before improvements were made, the lake-captains kept out in the offing, and landed their cargoes in small boats, rather than risk the perils of the so-called harbors. Even now, in the storms of autumn, vessels drive by the south-shore ports, running for the shelter of the islands rather than attempting to enter the narrow rivers, with their lines of spiles, which stand, like so many tenter-hooks, to impale the incoming ship. Little tugs—all engine and smoke—lie on and off these harbors, waiting for tows; no doubt, they are useful, but none the less ugly, bustling, pert little monsters, ducking under bridges with their smoke-stacks on hinges, whistling, puffing, and snorting, so that a listener might

think an ocean-steamer was coming in, instead of a grimy dwarf with some such melodious name as Old Jack. Having obtained its tow, a mile or two out, and fastened on to its prey, the tug takes the bit in its teeth, and comes snorting into port. Behind it glides the graceful vessel, her sails slowly coming down, cloud after cloud, until, as her bows reach the river-piers, there is nothing left but a jib, and the lines of rope and rigging stand bare against the sky.

The rivers are docked, and rows of canal-boats usurp their sides—canal-boats decked with lines of drying clothes, for it always seems to be washing-day on a canal-boat. A giant elevator is sucking grain from the hold of one vessel; red iron from Lake Superior is being unloaded from another; wood from Lake Huron, and limestone from the western islands, are coming in; coal and petroleum are going out; and the lines of slow-moving lumber-barges, the schooners and barks, the canal-boats, propellers, and side-wheel steamers, have only the narrow, crooked river for a roadway. The incoming tug catches a sight of all this confusion from the light-house at the end of the pier, and whistles defiantly. Hers it is to take the vessel safely to its berth, a mile up the river, and she does it; but what a labyrinth! On each deck stands each captain, from the well-dressed commander of the passenger-steamer to the grimy boss of the coal-barge. They halloa; they yell; they ring bells; they sound whistles; they back their boats; they start them forward; they edge them sideways; they squeeze, grind, race, crawl, or charge through, according to their several dispositions, but through, all! The Eastern passenger, going out on the evening boat, clutches his umbrella in alarm as he

Light-House, Buffalo.

sees round the curve the incoming tug with its three-masted bark in tow, entirely filling the channel. He glances at his captain, outlined against the soft evening sky on the hurricane-deck; but the captain merely rings his bell; the wheelsman clanks his chains in the pilot-house; and on sail the two great hulks, apparently determined to crush each other to atoms. The passenger looks on, and even thinks of jumping ashore; a few feet less, and he might do it, the river is so narrow. Then come a sudden clang, rattle, shout, and quiver; the steamer leaps backward and sideways for an instant; the tug claws the opposite bank in fury; the great vessel swings slowly aside; and the two boats pass each other, with hardly an inch to spare. And all the while on the canal-

Ship-Canal and Coal-Docks, Buffalo.

boats, which seem doomed to be ground to powder at the docks, the washing goes on, and the clothes are hung out as usual.

The shores of Lake Erie are wooded, rising, on an average, sixty feet above the water. Through this plateau the streams come down in gorges and ravines, and the banks are full of springs and quicksands. In a north wind the water is dark, and the waves dash on the beach with a loud roar; in an east wind it is sea-green, the white-caps curl toward the west, and it has a treacherous aspect; but, when the west wind blows, it is a blue summer sea, over which the ships sail gayly under a cloud of canvas. Only when the south wind comes off the land, bringing a gray rain-storm, does the lake lose all its beauty. Then it sullenly sinks into lethargy; the woods on its shores stand

ERIE, FROM FEDERAL HILL.

desolate; and the little villages, each with its long, dripping dock and warehouse, look so miserable that the lake-traveller hastily betakes himself to the inmost depths of the cabin and the most exciting novel he can find.

Mirage is seen on Erie at times, but fogs rarely, unless it be that soft haze of the twilight through which the vessels steal by each other like so many phantom-ships. In

Lake-Shore, above Erie.

the winter come the ice-fields, hummocks, plains, and moving floes; while above glitter the spears of the Aurora Borealis, stretching from end to end of the northern sky.

Lake Erie derived its name from the Eries, or tribe of the Cat, who lived upon its shores when the Jesuit missionaries first visited the country, two centuries ago. Every thing connected with the Eries, who have left only a name behind them, is involved in obscurity. They were a powerful tribe; they stood at the head of that

remarkable confederacy called the Neutral Nation; their principal towns were near the site of Buffalo, but they also roamed along the entire south shore, and had their fastnesses on its western islands. Suddenly came the Iroquois from the East, and exterminated them, man, woman, and child, in one day. Such is the tradition. But the name of the poor Cat tribe has lived after them; Erie the lake, Erie the town, Erie the canal, and Erie the railroad, have been in men's mouths ever since. Old Time has his little compensations, after all.

The city of Buffalo, taking its name from the American bison who roamed in herds along the shore as late as 1720, lies at the eastern end of Lake Erie. The neighboring

Main Light, at Erie.

post of Niagara was, however, of more importance in the early days of the frontier. Here, in 1769, La Salle's men had built the Griffin. During the long winter, with the frozen river lying before them "like a plain paved with polished marble," the Frenchmen, with their rude tools, sawed and hammered on the timbers they had cut from the forest. At last, on the 7th of August, all was ready; and, to the combined sound of a *Te Deum* and an arquebuse, the first vessel entered the waters of Lake Erie. Singularly enough, the little Griffin, after sailing safely through the unknown seas as far as Green Bay, and encountering gales on Huron and Michigan, came back to lay her timbers under the waters of Erie. She passed what is now Detroit, and entered the lake, but was never seen again. Where she went down, no one knows.

Buffalo was first settled in 1801. Previous to this date there had been one or two trading-cabins and a stockade fort on the creek, where the hunters and traders lived like Ishmael, with their hands against every man and every man's hand against them. Attacks by the Indians, scalping, hair-breadth escapes, the dangers of starvation and cold, formed the incidents of those years. But the little settlement kept itself alive, immigrants came, and in 1810 Tushuway, or Buffalo, including all that part of the State which lies west of the west transit line, was set off from the neighboring settlement of Clarence. These transits were meridian lines run by a transit instrument; they were sixteen miles apart. Thus, at its first organization, Buffalo contained an area of about three hundred thousand acres; this was an ambitious beginning, even for the "Queen City of the Lakes," as it is called. Shortly after this the progress of Buffalo was checked by the War of 1812; the frontier lake-country was ravaged by the contending armies and their savage allies, and, near the close of 1813, Fort Niagara was taken by the British, and the surrounding villages, including Buffalo, burned to the ground. When peace was declared the village was rebuilt, and in 1832 it took its place as a city, ranking now the third in point of size in the State of New York. The Buffalo of to-day is a large, bright, busy town, with broad streets of well-built residences and business blocks. It has a social reputation of its own, which may be described by the term "gay," used in its best sense: it has its driving-park and annual races; it has its club-houses, its brilliant amateur theatricals, and well-supported public theatres, while its private balls and parties are renowned for their gayety throughout the whole lake-country with its chain of cities. Cleveland, the "Forest City," is rivalling the "Queen," in the extent of her business; but, socially, the town of Connecticut origin is dull when compared with Buffalo; it is like comparing a Roundhead with a Cavalier.

The most noticeable feature of Buffalo is its mode of handling grain in bulk by means of its numerous elevators. These wooden monsters, with long trunks and high heads, stand on the bank of the river waiting for their prey. In from the lake come the vessels and propellers laden with grain from Milwaukee and Chicago, and the tugs carry them up within reach, and leave them to their fate; then down, out of the long neck comes the trunk, and, plunging itself deep into the hold of the craft, it begins to suck up the grain, nor pauses until the last atom is gone. Within this trunk are two divisions: in one, the troughs full of grain pass up on a pliable band; in the other, they pass down empty. In the hold of the vessel or propeller are men who shovel the grain toward these troughs, so that they may always go up full; and in the granary of the elevator above are men who regulate the flow of the grain into the shute, and cause it to measure itself by means of a self-registering apparatus, the whole adjusted and governed by the weight of a finger. It may be that this grain is to go eastward by the Erie Canal; in that case the canal-boat is waiting on the other side, a man opens another door, the grain runs down another trunk into its hold, and behold it ready for

its journey to New-York City. The transfer of forty bushels takes less than half a minute, and costs less than half a cent. Americans pass these elevators with but slight attention; every one is supposed to understand their workings, and no one sees any thing remarkable in them unless it be their ugliness. But visitors from foreign countries pause before them with curiosity; our uncouth planked elephants on the river-banks excite their interest, and for written descriptions of them we must go to European books of travel. Mr. Anthony Trollope, the author of the delightful series of English novels, "Barchester Towers" and its companion volumes, devotes several pages in his book on

Mouth of Cuyahoga River, Cleveland.

America to the Buffalo elevators. He says: "An elevator is as ugly a monster as has been yet produced. In uncouthness of form it outdoes those obsolete old brutes who used to roam about the semi-aqueous world and live a most uncomfortable life with their great hungering stomachs and huge, unsatisfied maws. Rivers of corn and wheat run through these monsters night and day. And all this wheat which passes through Buffalo comes loose, in bulk; nothing is known of sacks or bags. To any spectator in Buffalo this becomes immediately a matter of course; but this should be explained, as we, in England, are not accustomed to see wheat travelling in this open, unguarded, and plebeian manner. Wheat with us is aristocratic, and travels always in its private carriage."

Buffalo is attractive by force of its situation at the eastern end of Lake Erie. It does not lie on a side-bank, as Cleveland lies; it does not stand back on a bay, as Toledo and Sandusky stand; it does not retreat up a river, like Detroit; it takes its place boldly at the foot of the lake, and catches every breeze and every gale in their full strength. Through the vista of its broad streets, glimpses of blue water meet the eye, and the waves seem full of life as they dance across the bay toward the gate-way of the Niagara River, through whose portal they will soon glide past Grand Island, faster and faster, among the rapids, and over the foam-wreathed, misty precipice into the deep, green basin below.

Buffalo harbor is the largest on the lake, but, owing to its situation, it is often the last gathering-place for the weakened ice, so that when the other coast cities are sending out their vessels in the early spring, when Detroit River is open, and the iron fleets of Cleveland are starting for Lake Superior, the harbor of Buffalo is still reported by telegraph as "closed," "closed." At length the ice "goes"—no one knows where. Navigation is open, the double-whistles resound, the compact little boats of the Transportation Company start eastward through the Welland Canal, and the large propellers of the Union Line start westward for Chicago.

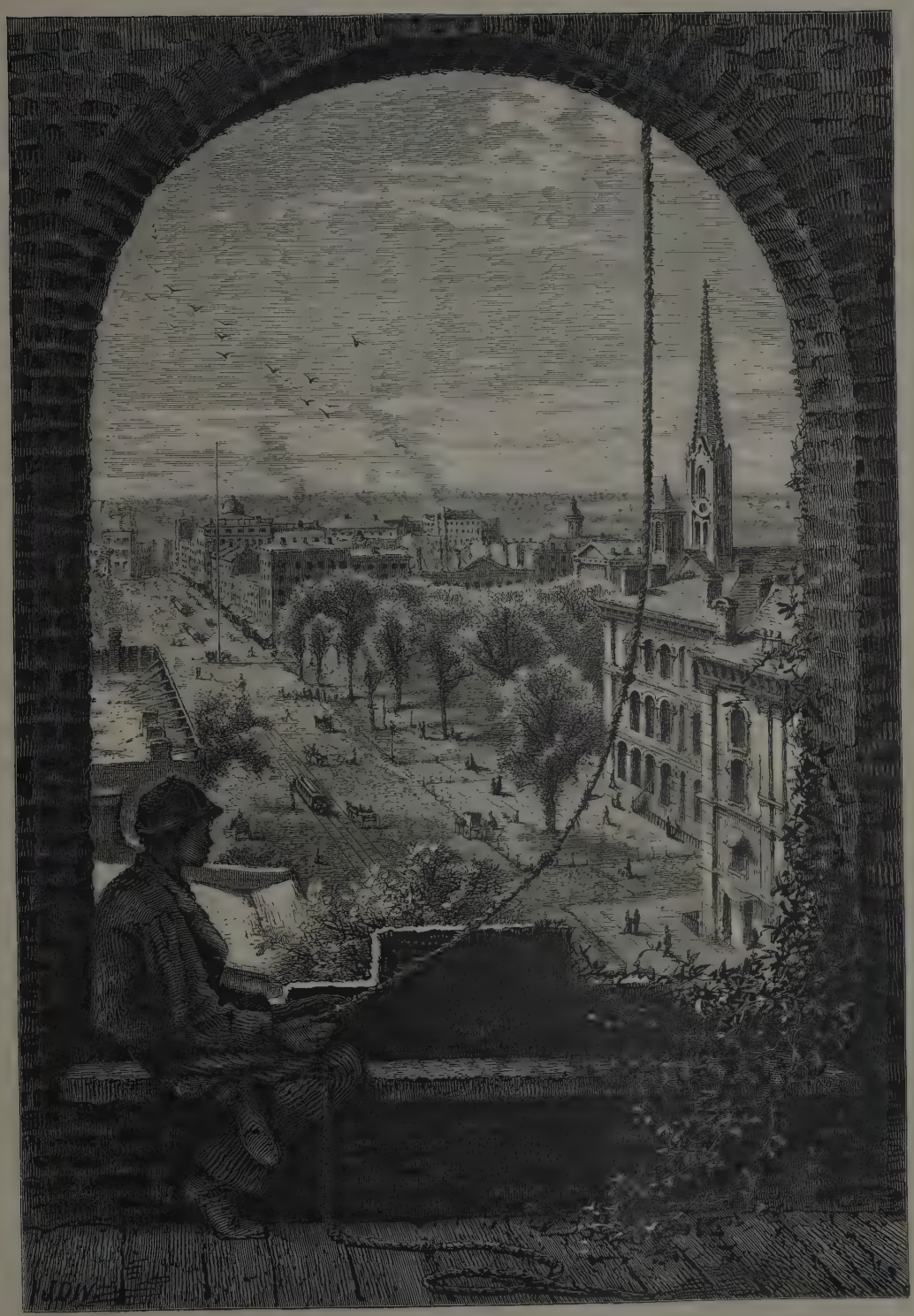
As the steamer leaves Buffalo Light behind, the lake broadens, and, after passing Sturgeon Point, the breeze is almost sure to freshen into a strong wind. Along this portion of the coast in winter the snow sweeps with fierce fury; here, if anywhere, the trains of the Lake Shore Railroad are blocked in spite of the long lines of snow-sheds; something in the lay of the land and the shape of the lake makes a snow-trap of this section; the wind sweeps howling over it when on either side it is calm—there are snow-drifts here when elsewhere there are none. It is a bleak coast, even in summer, with little to attract the eye. Occasionally a village is passed, where the smoke of a furnace or a mill and the masts of vessels show that a city is growing up; but even should the steamer turn into the wharf, there is nothing to be seen save the never-ending loading and unloading of the lake-schooners, the dock-hands with their wheel-barrows, and on shore the newness and the rawness of a Western town in its awkward, growing youth. One of these villages—State Line—marks the New-York boundary, and here begins the Triangle—that sturdy little elbow which Pennsylvania has pushed up to the lake-shore, as if determined to have a port somewhere, on fresh water if not on salt. In this triangle is the harbor of Presque Isle, now Erie, one of the early military posts on the lake. In 1795 two block-houses were built here under the direction of General Irvine, and a small garrison maintained for the protection of the surveyors who were locating the donation lands of the State. Previously, while employed in this work, General Irvine found that a tract of land in the shape of a triangle, including this harbor of Presque Isle, was, in a legal point of view, nowhere, being north of the Pennsylvania line, west of the New-York line, and east of the Connecticut Reserve. When

CLEVELAND, FROM SCRANTON'S HILL.

this was discovered, Pennsylvania set to work to obtain the little strip of water-front, and finally, after the Indian title had been acquired by the payment of twelve hundred pounds, the State purchased the land of the General Government, in 1792, for the sum of one hundred and fifty thousand six hundred and forty dollars and twenty-five cents. The Triangle contained an area of two hundred and two thousand acres. All along the lake-shore from Buffalo to Detroit are found traces of one of the difficulties of colonization, which is often lost sight of among the more dramatic troubles of storms, wild beasts, and Indians: this is the conflicting claims of rival land companies, and the consequent doubt as to the ownership of the soil. The domains of these companies were varying and indefinite in boundary, from the Plymouth Company of James I., which took in New York, Pennsylvania, Ohio, Canada, and all the Northwestern States, to the grant of the Portuguese Dohrman, of one six-mile township, for aid rendered to American vessels during the Revolution. The same territory was granted and regranted again and again, and the bewildered settler—between the French, British, Indian, and individual claims—sat down by his half-sawn tree to study his useless title-deeds and solve an impossible problem. The traces of this period are found in the names which cling to the lake-shore; in spite of the decorous counties and townships, the old people still talk of the "Holland Purchase," the "Struck District," the "Triangle," the "Western Reserve," the "Fire Lands," the "Maumee Road Tract," and the "Black Swamp." These titles have each their local history, and were derived either from the original grant or the nature of the soil. "Struck District" is not melodious, certainly; but it came into being because its land was struck out of a lottery which was organized for the impartial distribution of a donation tract; thus it had, at least, a reason for existence, which is more than can be said for the titles gravely selected by Congress for the Lake States: "Assenispia," "Metropotamia," "Polypotamia," and "Pelisipia." Fortunately, those conglomerates were rejected.

The situation of Erie is picturesque, owing to the beauty of its bay and outlying island. As early as 1753 the French landed at this point and erected a little fort, naming it Presque Isle; it was one of a chain which was to connect the St. Lawrence, and *la belle rivière*, as they called the Ohio. In 1760 Presque Isle was surrendered to the British, and soon after it was destroyed by the Indians, in that memorable year in the history of the lake-country when nine out of the twelve posts of the white men were captured on the same day, and their garrisons massacred. From that time the beautiful bay was solitary until the arrival of the surveyors.

The present town of Erie was incorporated as a borough in 1805. In its bay Commodore Perry built most of the vessels of his famous little fleet, having for material only the trees of the forest, and for plans only his own iron determination. A modern ship-builder would stand aghast before such a problem: given, a forest and a bay; wanted, a fleet. But in seventy days the vessels were completed, and, whether well-



SUPERIOR STREET, CLEVELAND, FROM PRESBYTERIAN CHURCH.

modelled or not, they sailed away bravely from the Presque Isle harbor, fought the battle of Lake Erie, and returned in triumph with a line of British ships in tow. The remains of Perry's flag-ship, the Lawrence, lie in the Erie harbor, and on the bank above the embankments of the old French Fort Presque Isle can be traced. Erie is a thriving town—the outlet of the iron and coal district of Western Pennsylvania; it is the principal market for bituminous coal on the lakes.

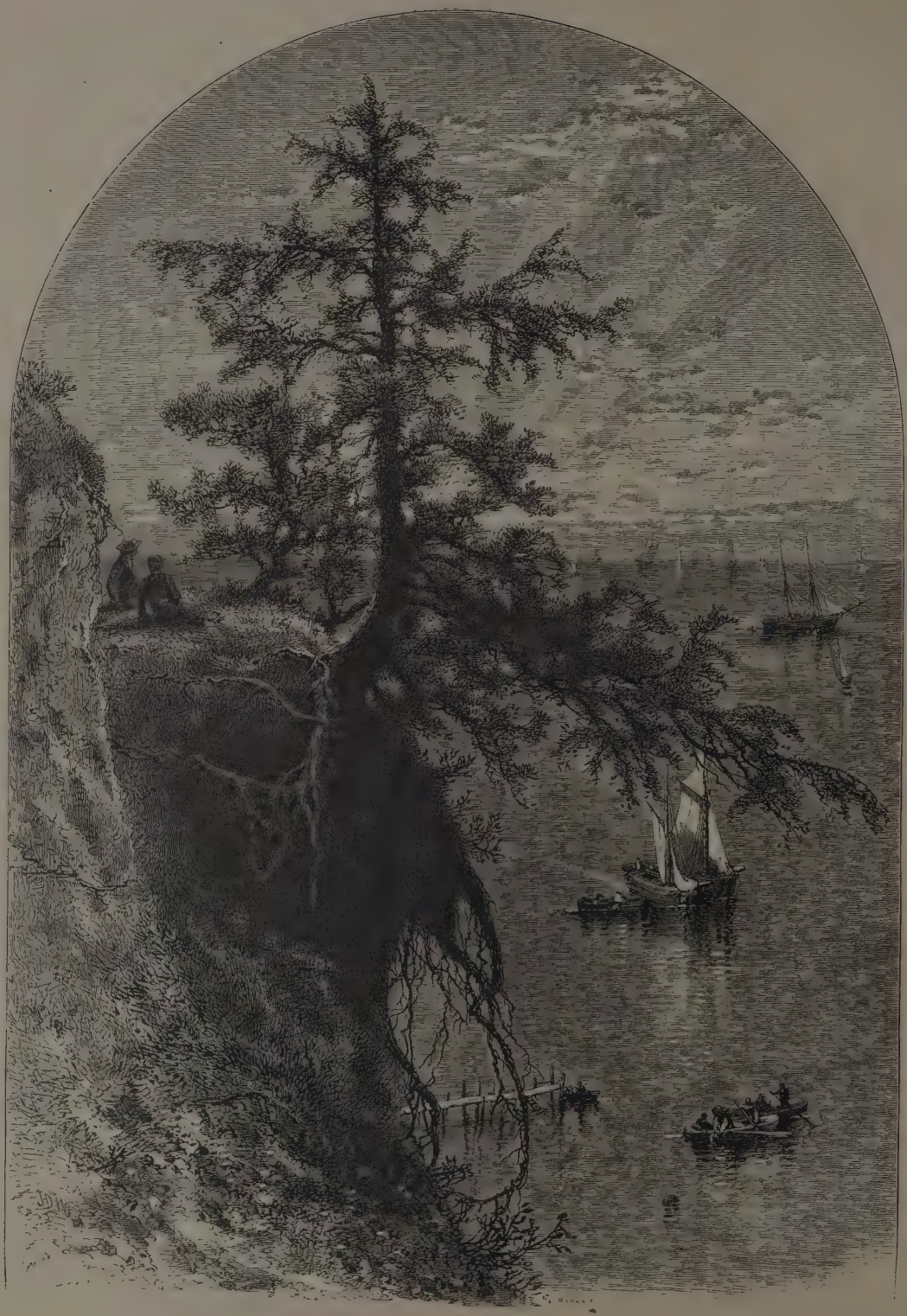
Euclid Avenue, Cleveland

Dotted along the coast stand the light-houses, picturesque towers finding a footing on lonely islets and rocky ledges, wherever they can command a wide sweep of the horizon. The farm-buildings cluster inland; but the light-house, with the keeper's little cabin at the base, stands alone on its point, where its tower gleams white by day and red by night far out at sea. To the traveller over the Western waters the light-houses seem both picturesque and friendly. There is almost always one in view; for the

steamers keep within sight of the shore, and, a pillar of cloud by day and fire by night, they greet the voyager as he journeys, one fading astern as the next shines out ahead. The light at Erie is visible for a distance of twenty miles.

Farther west the Triangle of Pennsylvania ends, and Ohio comes forward to the lake-shore. Here began the possessions of the Connecticut Western Reserve, and its Plymouth was the present bay of Conneaut, a Seneca word, signifying "many fish," where the first New-England emigrants, on the 4th of July, 1796, pledged each other in tin cups of lake-water, accompanied by a salute of fowling-pieces. The next day they began to build a large log-house, the first on the Reserve, which was long known as "Stow Castle." This portion of Ohio soon became the favorite locality for New-England emigration; so wide-spread grew the fever that resort was had to all devices to cure it, and there are still in existence caricatures which were scattered broadcast through Massachusetts and Connecticut, one representing a plump, smiling man mounted on a sleek horse, with the legend, "I am going to Ohio," coming out of his mouth; and the other, showing the same man, worn to a shadow, leading a skeleton steed drearily homeward, with the sarcastic motto, "*I* have *been* to Ohio!" But caricatures were of no avail, and the Ohio lake-shore was at an early date settled by a thrifty, vigorous New-England colony.

Cleveland, the city of the Western Reserve, is universally considered the most beautiful town on the Great Lakes. It was named after General Moses Cleveland, the agent of the Connecticut Land Company, and was first settled in 1796. The town lies on both sides of the Cuyahoga River, a narrow, crooked stream, which flows through a deep valley into the lake, leaving on either side the bluffs whose shaded streets have gained the name of "Forest City." The houses are embowered in foliage, and, were it not for the width of the avenues, it would seem like a city built in a wood. As it is, the traveller coming into the harbor on the Buffalo boat cannot realize its size, save from the spires that rise through the green, and the layer of dark smoke which rests above its central valley. This valley is called the Flats. Not long ago it was a marshy meadow, where the river meandered in peace, with nothing to disturb its sedgy margin save the cows and water-birds. Now it is a dense mass of iron-mills, lumber-yards, and oil-refineries—a seething basin of life, movement, noise, and smoke. But all this bustle is hidden away from the town; the Flat is a deep pocket, and only the smoke and the tips of masts betray what is going on under the hill. Above, on either side, stretch the long avenues, with miles of pleasant residences, gardens, velvet lawns, vines, and flowers. Each house is isolated in green, and one of the avenues is lined with rows of country-seats, with extensive grounds, such as are seldom seen within the limits of a city. But Cleveland on the hill is not like a city; it is like a suburban village multiplied by ten, and miraculously endowed with gas and pavements. Even in its central square, with its post-office, court-house, business-blocks, and horse-cars, it has an air of leisure; and the



LAKE ERIE, FROM BLUFF, MOUTH OF ROCKY RIVER.

statue of Commodore Perry, the flag-staff, and the little seats scattered over the grass, seem quite appropriate to its elegant ease. But, step to the verge of the hill, and every thing is different. Down on the Flat we see Cleveland at work, Cleveland grimy, Cleveland toiling in the sweat of her brow. Slowly through the oily river, whose name fitly signifies "crooked," wind the heavily-laden boats, bringing work for all these puffing engines, and taking away the product in its new shape as fast as the engines let it go. Here are seen all varieties of the lake-craft, from the scow to "The Last of the Mohicans" among boats, the two large side-wheel steamers which ply between Cleveland and Detroit—last remnants of a stately tribe which once ruled the Western waters, and carried their hundreds of passengers to and fro, with bands of music and flying flags. The stately steamers are gone; their hulls are dismembered, and their engines now run on the Hudson River; they were tried by the great American test, "Does it pay?" and

Mouth of Rocky River.

found wanting. The sturdy, compact propeller has driven them from the lakes so entirely that these two Cleveland boats are regarded as relics of a past age.

As Buffalo has its elevators, so Cleveland has its oil-refineries, which line the river-valley for miles. Hither, from the petroleum district, comes that fiery fluid which, hidden through all these centuries, has crowned the nineteenth with its dangerous splendor. Here it is purified, and sent forth into the wide world to fulfil its mission. In its train is power as yet but half discovered; in its train is light as yet but half developed. But with it rides Death on a fiery steed, taking his victims hourly; Ignorance and Carelessness do good service as his aides; and the daily papers record the list of mortality. So far, our new slave of the lamp is a dark master; and the world waits for the mind which shall put the yoke upon this doubtful, dangerous servant, and make it do its work in safety, as steam and electricity do theirs.

The population of Cleveland is largely composed of the descendants of the New-England pioneers, and to their thrift belong the miles of pleasant streets. There is, however, a large German element, also. In a letter written by one of the early land-owners, in 1805, the following promise occurs: "If I make the contract for thirty thousand acres, I expect, with all speed, to send you fifteen or twenty families of

Black River, near Elyria, Ohio.

prancing Dutchmen." Whether these prancing Teutons were or were not the parents of the present race in Cleveland, certain it is that the city has prancing vineyards and flowers and wine, dancing and music, which never grew from a Puritan stock. Along the lake-shore are German gardens, public and private; German vineyards, and German country-houses. Thither the people resort when the work of the day or week is over; and, sitting on the grassy slopes, they smoke the pipe of peace, and look off over the

lake, watching the sunsets which are the glory of Cleveland. The sun, throughout the summer, sinks directly into the bosom of the water, lighting up the floating clouds with gorgeous tints, which cannot be surpassed the world over. Crimson mountains lie on the horizon, their soft peaks fading into rose; then comes faint pink, tipped with gold, which lies against a deep-violet background, shading away higher and higher, until it mingles with the quiet blue of the zenith. The evening is the Western sailor's favorite starting-hour; and one by one, against the glowing sky, the ships steal out of the harbor, and, setting their white sails, glide away over the hazy water, and vanish into night. The gazer stands enchanted; he has no words; a silence falls upon him; and, motionless, he watches until the last vessel is lost in the twilight haze, and the last tint has faded into the usual blue of the summer-night; then, over the lake, shines out the evening-star, and he turns homeward with a sigh.

West of Cleveland, the coast grows more picturesque; the shore is high and precipitous, and the streams come rushing down in falls and rapids. Seven miles from the city is Rocky River, which flows through a deep gorge between perpendicular cliffs, that jut boldly into the lake and command a wide prospect. Here is the most extensive unbroken view of Lake Erie; Black-River Point is seen on the west, and the spires of Cleveland shine out against the green curve of the eastern shore; but far away toward the north stretches the unbroken expanse of water, and one can see on the horizon-line distant sails, which are still only in mid-lake, with miles of blue waves beyond. Attached to the cliffs of Rocky River is a fragment of history whose truth is attested, not by the historian's page, but by the silent witnesses of its sands. When Pontiac made his successful attack on all the British forts of the lake-country, in 1763, the post of Detroit made a determined resistance, refusing to surrender, in spite of its desperate situation throughout months of suspense and fighting. In the autumn, an expedition in *bateaux*, under the command of Major Wilkins, was sent from Albany to the assistance of the beleaguered garrison; and, after a toilsome journey, and skirmishes all along the route with hostile Indians, the soldiers, by means of portages, reached Lake Erie with their *bateaux* at the present site of Buffalo, early in November. The British officers and their men knew nothing of the treachery of the Western waters; no doubt, the golden haze spread a veil of enchantment over the lake, and they journeyed on a summer sea, camping at night on the purple-shadowed shores, under the soft sky of the Indian summer. Fair is Lake Erie at this season, fairer than the dream of a heavenly lake aloft in the clouds; and, lying on its warm sands, gazing off to sea, the dreamer is soon lost in a reverie of golden ease, which makes the present seem a forever. But suddenly there comes a stir, a mutter, a sullen darkening; and, almost without warning, down sweeps the gale upon this placid sea, lashing the waves into foam, and sending them thundering up to a vast height against the opposing cliffs.

One of these sudden autumn storms overwhelmed Major Wilkins's expedition.

Red-Mill Falls, Black River, Elyria.

Twenty *bateaux*, most of the field-pieces, all of the ammunition, seventy men, and three officers, including the surgeon of the regiment, were lost. The survivors, wet and exhausted, reached the shore; and, when the storm had subsided, they made their way back to Fort Schlosser, on the Niagara River, without even attempting, in their crippled condition, to reach the besieged garrison of Detroit. Such is the story as gathered from the curt accounts of that day; but the exact site of the shipwreck is not mentioned. Here it is that the mouth of Rocky River supplies the missing links. On the plateau overlooking the left bank, a bayonet was thrown out by a plough in 1859; and near it a circle of bowlders was uncovered, containing the ashes of a camp-fire, a case-knife, and the blade of an English amputating-knife. This last relic probably belonged to the lost surgeon, Dr. Williams, of the Eightieth Regiment. The mouth of Rocky River is crossed by a hidden sand-bar, and, during the fall storms, the channel is

narrow and dangerous. Upon the right shore there was at that time no landing; but in the left bank was a gully, which led to the plateau where the ashes of the fire and the surgeon's knife were found. Here the survivors assembled and spent the three days of storm (the autumn gales of Erie continue through three days). The camp-fire and case-knife; the portions of the water-soaked *bateaux;* the gun-flints, bayonets, and musket-barrels; an ancient and elaborately-finished sword, with guard and lion's-head hilt of solid silver; but, most of all, the peculiar amputating-knife—fix the site of Wilkins's disaster at the mouth of the picturesque Rocky River.

A short distance westward, the lake has another storehouse of relics. Here, in 1764, on a narrow, exposed beach, Bradstreet's expedition also was wrecked during an autumn storm. Accounts of this disaster are given in Parkman's "History," and other authorities; but the exact place is not specified, and here, again, the beach speaks for itself. Portions of the *bateaux* have been discovered, six-pound cannon-balls and a number of musket-balls, a stack of bayonets, entire and perfect musket-barrels, silver coins of 1717, and several antique silver spoons. Each violent storm adds to the relics, and the fisherman's net brings them ashore, or comes up cut and drawn by something fixed in the

Lumber-Boats, Sandusky, Ohio.

sandy bottom, probably the sharp corners of other *bateaux*. After the wreck, the provincials, or American soldiers, under General Israel Putnam, were left to find their way by land to Niagara, four hundred miles distant, through a wilderness crossed by rivers and swamps, and filled with hostile Indians. The first steps of their way from the beach are marked by articles thrown down to lighten their burdens. A bayonet was recently found fixed in the clay cliff, which had evidently been used by the retreating soldiers as a fixture by which they could draw themselves up to the top of the bank. At another point was a stack of bayonets piled against a tree, and a musket, which had stood as it had been left a hundred years before, leaning against the crotch of a tree until the wood had grown completely around it. The soldiers suffered severely, and many of them died on the way. It was December before the last stragglers reached the gates of old Fort Schlosser.

West of Rocky River, the Black, Vermilion, and Huron Rivers, flow into the lake through ravines of wild beauty. The Black River is a beautiful stream. On a peninsula formed by its forks stands the town of Elyria, a name which is unique, having been derived from the surname of the first proprietor, "Ely," and the last syllable of his wife's Christian name, "ria," from Maria. The river falls over a rocky ledge, forty-five feet in height, in two streams; and its whole course is full of picturesque beauties, making it remarkable among the Lake-Erie tributaries, which, for the most part, are decorous, uninteresting creeks, coursing along slowly between tame shores, and making an undignified entrance into the lake by oozing through the sand-bars which clog up their passage.

Beyond the Black River, westward along the shore, stretch the Fire-Lands. This district was set apart by Connecticut, from her Western Reserve Lands, for the aid of sufferers by fire in New London, Fairfield, and Norwalk. It contained seven hundred and eighty-one square miles. The first settlement upon the Fire-Lands was made in 1808; the settlers came from New England, and for several years they suffered every privation in this lonely wilderness. In a manuscript history of the Fire-Lands, an amusing description is given of their determined attempts at sociability under difficulties. A family arrived from Connecticut, and, after considerately giving them a breathing-space of several months, the *élite* of the Fire-Lands paid them a visit of welcome. The hostess was delighted, and, according to the laborious custom of the time, prepared to honor them with a feast. Her only fire-proof utensil, however, was an old, broken bake-pan. With this she bravely set to work. First, some pork was fried in it to get lard; secondly, doughnuts were fried in the lard; thirdly, short-cakes were made in it; fourthly, it was used as a bucket to draw water; fifthly, the water was boiled in it; and, lastly, the tea was made in it, and pronounced excellent by the waiting guests.

Sandusky, the "Bay City," has spread out before it a lovely view. The town itself is not busy and breezy like Buffalo, nor adorned with costly residences like Cleveland, neither does it command, like Rocky River, a broad, landless ocean, whose waves roll

in unbroken and dash against steep cliffs. But lovely is the bay with its gently-sloping shores and island—its river coming from the south and sweeping past the town, the peninsula opposite with its vineyard, and beyond, in the broad lake outside, the wine-

Glimpse of Sandusky, from St. Paul's Church.

islands, near and far, stretching one after the other, green, purple, a cloud, a speck, a mist, toward the Canada shore. It is a peaceful view, also; one is not here called upon to calculate the statistics of grain, oil, or iron, and count the profits. The artist and

the poet, who are out of place where traffic and dollars rule, might take to themselves homes on these lovely shores, nor ask a more beautiful prospect than this.

Sandusky has a mysterious name, whose derivation is a matter of dispute. In the early days a Polish trader, named Sandowski, lived upon the bay, and his descendants claim that the name came from him; on the other hand, it is said to be a Wyandot word, signifying "wells of cold water." The searcher for the picturesque, whether for eye or ear, will certainly choose the Indian derivation, and all along-shore he will do his best to fix these half-forgotten titles on the bays and cliffs, where they belong, so that they who come after may at least catch the echo of the lingering names which belonged to the vanished races of the lake. The beautiful country around Sandusky was a favorite resort of the Indians; they hunted on the slopes and fished in the bay, whose upper waters are an archipelago of green islets, abounding in ducks and other water-birds. Here were the villages of the Neutral Nation, a remarkable confederacy, the bare fact of whose existence among savage tribes is an anomaly; the meagre chronicles of the first explorers speak their little word of astonishment, and then pass on to their monotonous record of massacres and miles. We, of a later date, pause before this marvel, but can find but a bare outline of what it was. Two "cities of refuge" stood on the Sandusky River, and whoever entered their boundaries was safe from all pursuit: this sanctuary-land was guarded by bands of the Neutral Nation, who permitted hostile war-parties to enter and rest in the forts, provided they came in peace. The French missionaries speak of these villages as having been long in existence when they visited the lake two centuries ago. This sacred soil of peace was never reddened, this sacred pledge never violated, until after the coming of the whites, when, gradually, the Neutral Nation was driven away, and the land they guarded desecrated by the shedding of blood. The poor red-men have never been credited with a taste for the beautiful; indeed, the pioneers, who have fixed their place in the world's estimation, considered them little better than the bears. Yet all along the lake-shore, if we discover a peculiarly lovely island or bay, like this of Sandusky, we are sure to find also the tradition that it was dear to the Indians. Nowhere on Erie could the Neutral villages be so fitly placed as here, where the sheltered gentle water speaks the very language of peace.

Sandusky was first settled in 1817. During the late war, Johnson's Island, lying opposite the city, was used as a depot for Confederate prisoners, principally officers.

Sailing out through the bay, passing the unwieldy lumber-boats coming in heavily laden from the lumber-country of Lake Huron, the little fishing-smacks, and the light-house on its point, the steamer enters the lake, and turns toward Kelley's Island. This group of islands, fifteen or more in number, lying in the southwestern corner of Lake Erie, has come into notice at a comparatively recent date. The first pioneers preferred the solid main-land; they found enough to do in forcing their forest-fields to yield them sustenance without encountering in addition the dangers of this inland sea. Even the

grasping land companies did not stretch their hands as far as this vaguely-known group, which was, therefore, left to the adventurers who hover in front of civilization, and disappear before its advance. These adventurers are not free from a suspicion of having been fresh-water buccaneers on a small scale: wreckers they certainly were, and reaped a good harvest on their beaches during the autumn storms. But at length United States surveys were made, the land was entered and purchased, farm-houses were built, and fishermen, attracted by the number of bass, who have given their name to a portion of the group, made their homes upon the shores. At the present day there is a population of several thousands.

Kelley's Island is the largest of the American group, con-

South Coast, Kelly's Island.

taining about two thousand eight hundred acres. There is here an Indian-writing upon the rock, which has been pronounced the best-sculptured and best-preserved inscription in the West; it probably owes its distinctness to its remote situation, at the end of an island, which has remained uninhabited until within a few years. The almost mythical tribe of Eries had here a fortified retreat, whose outlines can still be traced, and, according to interpretation, the inscription refers to them, and their final destruction by the Iroquois.

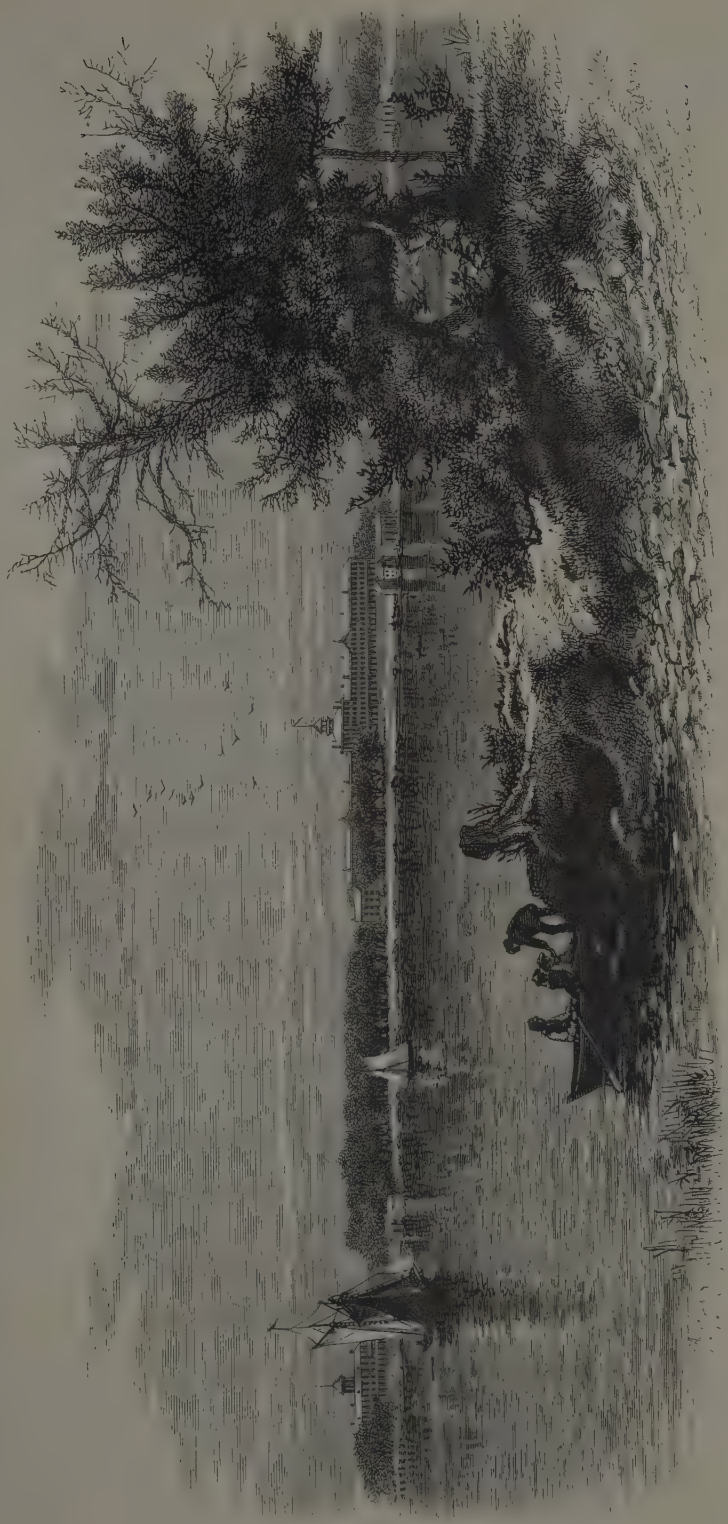
Put-in-Bay Island received its name from Commodore Perry, who put in there with his fleet before and after the battle of Lake Erie, during the War of 1812. After leaving the harbor of Presque Isle, where he had built his war-vessels from the growing forest, Perry made sail for the head of the lake, and anchored in Put-in-Bay, opposite

Kelly's Island.

the British fleet, which lay under the guns of Malden, on the Canadian shore. Here he remained for some days watching the movements of the enemy, in order, if possible, to bring on an engagement. At length, on the 10th of September, at sunrise, the British squadron of sixty-four guns appeared off Put-in-Bay. Perry made sail, but, owing to the light breeze, it was after eleven o'clock before they came within range of each other's guns. Thus for several hours the vessels were slowly approaching each other, although but ten miles lay between. Perry had hoisted a Union Jack with the dying words of Captain Lawrence for a motto: "Don't give up the ship!" The men cheered the little flag—only a young commander could have designed it—and then silence fell as the enemies neared each other. In these days of steam and improvements, so called, in the art of warfare, this handful of hastily-built, unwieldy wooden vessels at Put-in-Bay

may seem insignificant. Yet they held all there is of heroism and bravery in man; they counted their dead by scores; they infused new courage into the dispirited frontier; and they gained for the nation the control of Lake Erie, which has never since been disputed.

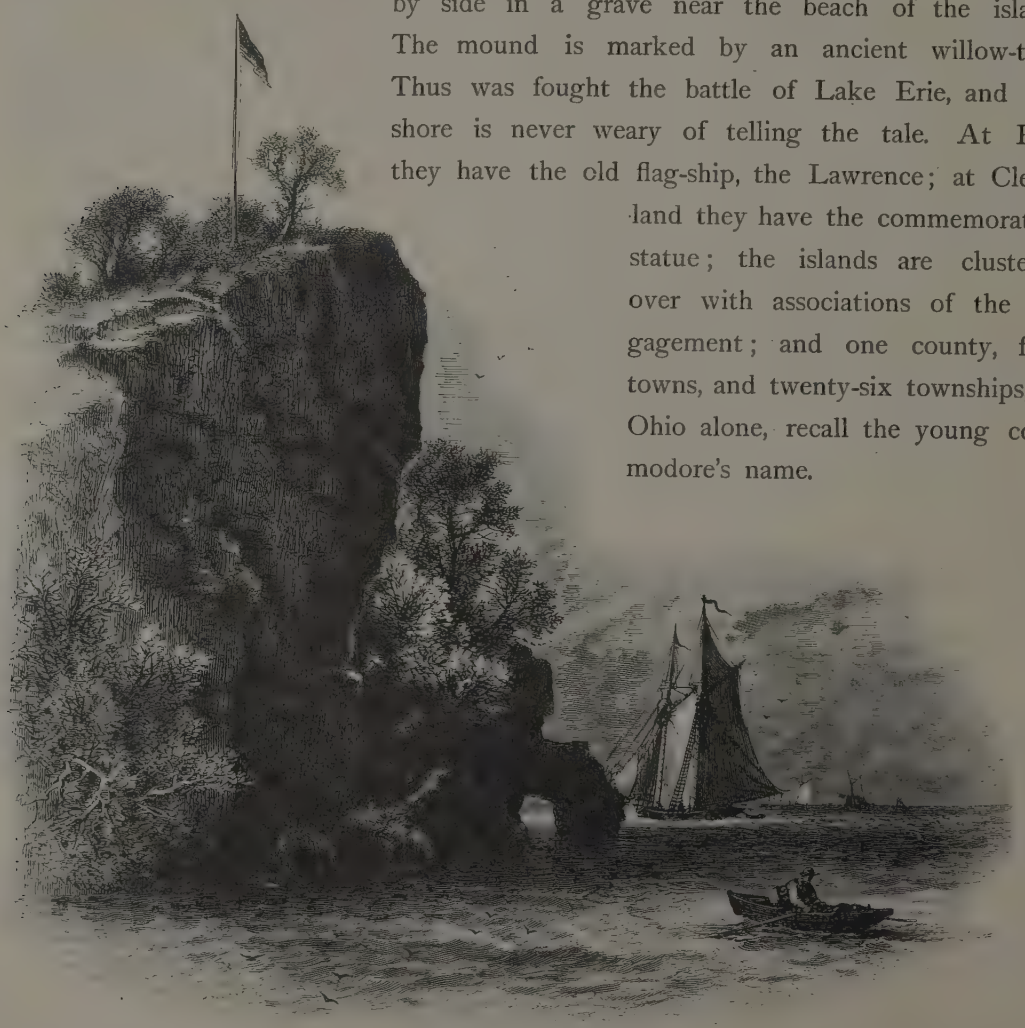
The British opened fire from their long guns upon Perry's flagship, the Lawrence, which was alone in an exposed position in advance of the other vessels, owing to the impetuous haste of the gallant but young and inexperienced commander. The Lawrence returned the fire, but her guns were short, and could do but little execution, while her own decks were swept by the enemy and her men picked off until twenty were killed, sixty wounded, and every brace and bowline cut. For two hours the flagship endured the whole fire of the British fleet concentrated upon her.



Put-in-Bay.

The men remained cool and determined; as fast as one fell another took his place, and when all were disabled or dead, and every gun dismounted but one, Perry and his surviving officers took hold and worked that to the last. At length, about two o'clock, a fresh breeze sprang up, and the Niagara was able to come to the assistance of the suffering flag-ship. Perry immediately determined to transfer his quarters on board of the uninjured vessel, and, taking his little Union Jack under his arm, he crossed over in an open boat in the midst of the broadsides of the enemy levelled directly at him. Reaching the Niagara in safety, he hoisted the motto again, caused the other vessels to be brought up into position with sweeps, ordered a general engagement, broke through the enemy's line, and kept up his fire until every British vessel struck her colors. The engagement lasted three hours, and the victory was decisive. The British loss was large, and Commodore Barclay, who had lost an arm at Trafalgar, was severely wounded.

After the battle the dead were buried; the officers of both squadrons were laid side by side in a grave near the beach of the island. The mound is marked by an ancient willow-tree. Thus was fought the battle of Lake Erie, and the shore is never weary of telling the tale. At Erie they have the old flag-ship, the Lawrence; at Cleveland they have the commemorative statue; the islands are clustered over with associations of the engagement; and one county, four towns, and twenty-six townships, in Ohio alone, recall the young commodore's name.



Perry's Lookout, Gibraltar Island.

Perry's Cave, Put-in-Bay Island.

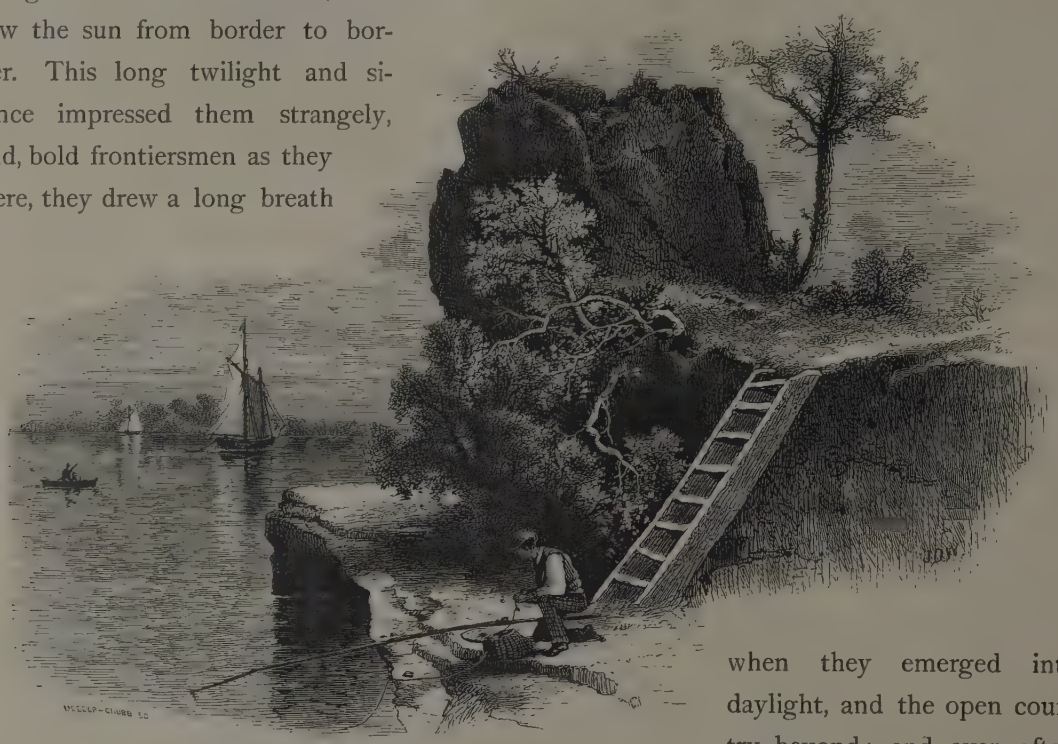
Put-in-Bay is a lovely sheet of water, with Little Gibraltar islet nestled in its crescent. Put-in-Bay Island has two large summer hotels standing among its vineyards. Roses bloom in its gardens in December.

Some of the islands are still wild and uninhabited, and several have only a single family. They abound in caves and rocky formations, to which, in many instances, Perry's name is attached. Little Gibraltar is crowned with the towers of a picturesque villa; it has also its Sphinx Head, which may be called a fresh-water imitation of the Egyptian queen. The Rattlesnake Island and its rattles alone preserve the memory of the real aboriginal inhabitants of the group, who, according to the geographies of the last century, "lay in acres upon the lily-leaves basking in the sun, and hissing out a breath which struck death to the incautious mariner who ventured near these isles of terror."

Along the Sandusky peninsula and over the islands stretch the vineyards, whose grapes and wine form the feature of this portion of the shore. Here in the sunny autumn, when the long aisles are full of gatherers, and the trellises are heavy with purple bunches, when the little steamers go away loaded with grapes, and the presses in the wine-houses crush out their juice by day and by night, the islands are like an enchanted land, watching the autumn out and the winter in with light-hearted joyousness. The water is still and blue, the colored trees are reflected in its mirror, a golden haze shines over the near islands, and a purple shadow lies on those afar.

West of the Fire-Lands lies the country called the Black Swamp, well known in the early settlement of the lake-shore, and even now retaining enough of its primitive character to justify the name. This district is one hundred and twenty miles in length and forty miles in breadth, almost equalling in area the State of Connecticut. The oral

and written accounts of pioneer-life in Ohio are full of dismal tales of this region. Wild beasts roamed in its fastnesses, coming out into the settled districts, ravaging the flocks, and carrying terror to the isolated homes bordering on the wilderness. As immigration increased, villages sprang up on all sides, but the Swamp itself long remained almost an unknown land. It was a singular region, and not without its charm; its level surface and the uniformity of its soil gave to the forest a remarkable regularity—the trees being of the same height, extending in straight ranks mile after mile, resembling from a distance an even, blue wall against the sky. The foliage was so dense that when the first roads were built through to the West the immigrants travelled for days along the shadowed aisles, nor saw the sun from border to border. This long twilight and silence impressed them strangely, and, bold frontiersmen as they were, they drew a long breath when they emerged into daylight, and the open country beyond; and ever afterward they spoke of the journey in terms which seem almost poetical when compared with the practical prose of their ordinary language. But it was not the poetry of admiration; it was a vague fear, a vague wonder over the mystery of the dark labyrinth, and what it might contain. Yet it was not a land of desolation. Vines and blossoms were everywhere, and birds sang among the branches. It was the mystery that impressed them—"a land of the shadow of death," they called it.



Sphinx Head, Gibraltar.

The soil of the Black Swamp is very fertile; as soon as it is drained it becomes a garden—fruit, grain, and vegetables, spring up with wonderful rapidity, and already many parts of the territory are under cultivation. Towns have now grown up within its borders, and the locomotive rushes past the old corduroy roads laid on the quaking morass,

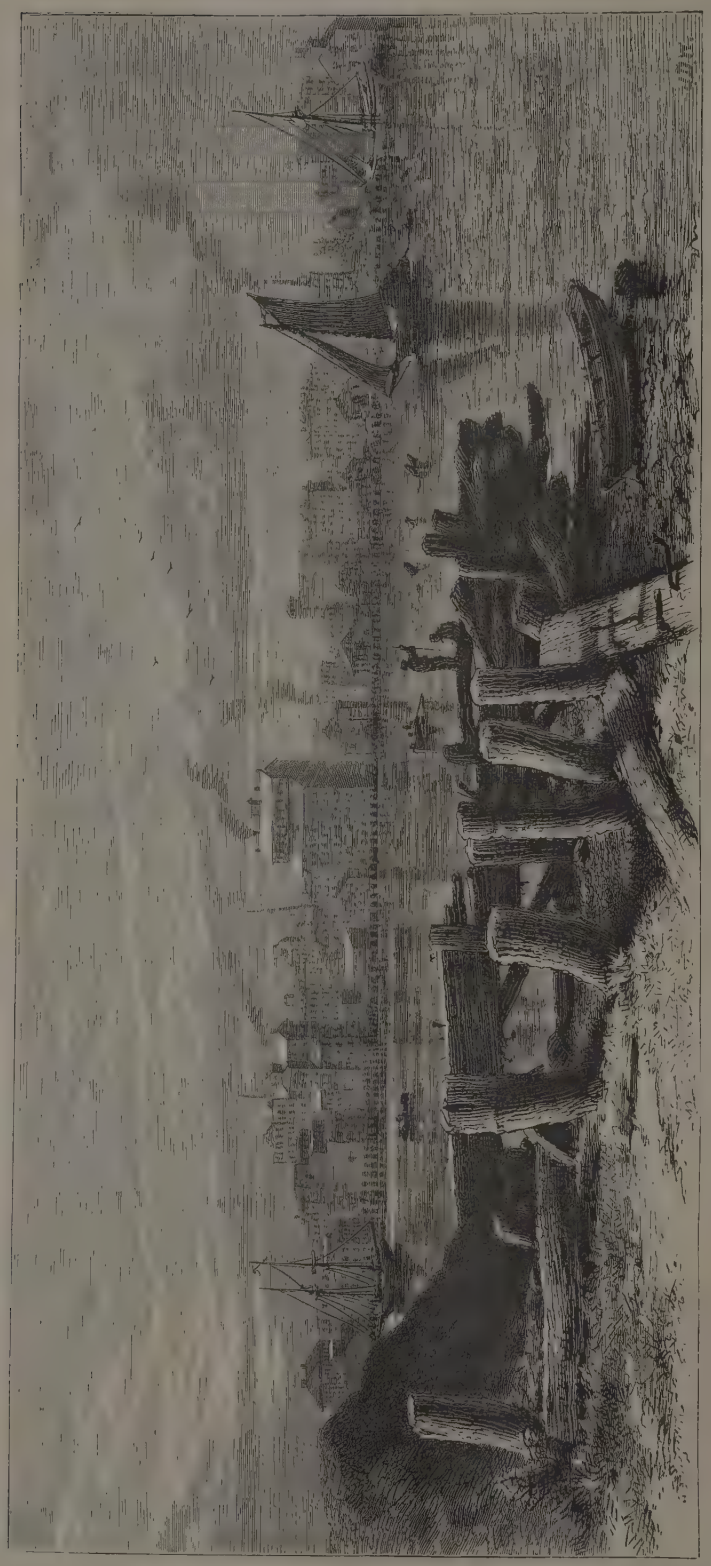
over which the immigrants floundered, and thought themselves fortunate if they escaped without swimming. The name and its associations are fading away. Two opinions, representing the æsthetic and practical idea of the region, are recorded: "It is a magnificent forest," writes an English traveller. "It is a miserable bog," writes a New-England immigrant. Both were sincere.

As the lake-shore is divided into districts whose boundaries, although not to be found on any map of the day, are yet better known than the carefully-marked lines of the counties; as these districts have names of their own, often spoken, although not set down in the geographies—so each has its one city, and one only, as though Chance had set to work to build up a capital for the chance divisions, and prove her own superiority to arbitrary laws. Thus the Holland Purchase has Buffalo; the Triangle has Erie; the Western Reserve has Cleveland; the Fire-Lands have Sandusky; and the Black Swamp has Toledo.

This city, with its Spanish name, stands on the Maumee, a river which once bore the melodious title of Miami of the Lakes; Ohio having already two Miamis, the name of the northern river was changed. Toledo is four miles from the mouth of the river, and ten miles from the lake, Maumee Bay lying between. It ranks fourth among the Lake-Erie cities—Cleveland, Detroit, and Buffalo, exceeding it in size.

The river-valley south of Toledo was a continual battle-ground during the early days of the nation, after the Declaration of Independence; and, if there was any danger of a collision between the British, Americans, or Indians, it was sure to take place, at last, on the ill-fated Maumee. Its early maps bristle with forts; the sketches of its history are crowded with skirmishes. Although peace was declared between Great Britain and the United States, out here on the Western border animosity still raged, and the treachery of the Indians provoked continual warfare. The story of the Maumee during these years, and until after the War of 1812, was but a succession of marches and countermarches, treaties of peace, massacres, retreats, and attacks, following each other with perplexing rapidity; and the only figure that stands out clearly is mad Anthony Wayne, called by the Indians the "Wind," because he "drives and tears every thing before him." General Wayne's decisive battle was fought on the Maumee, in 1794.

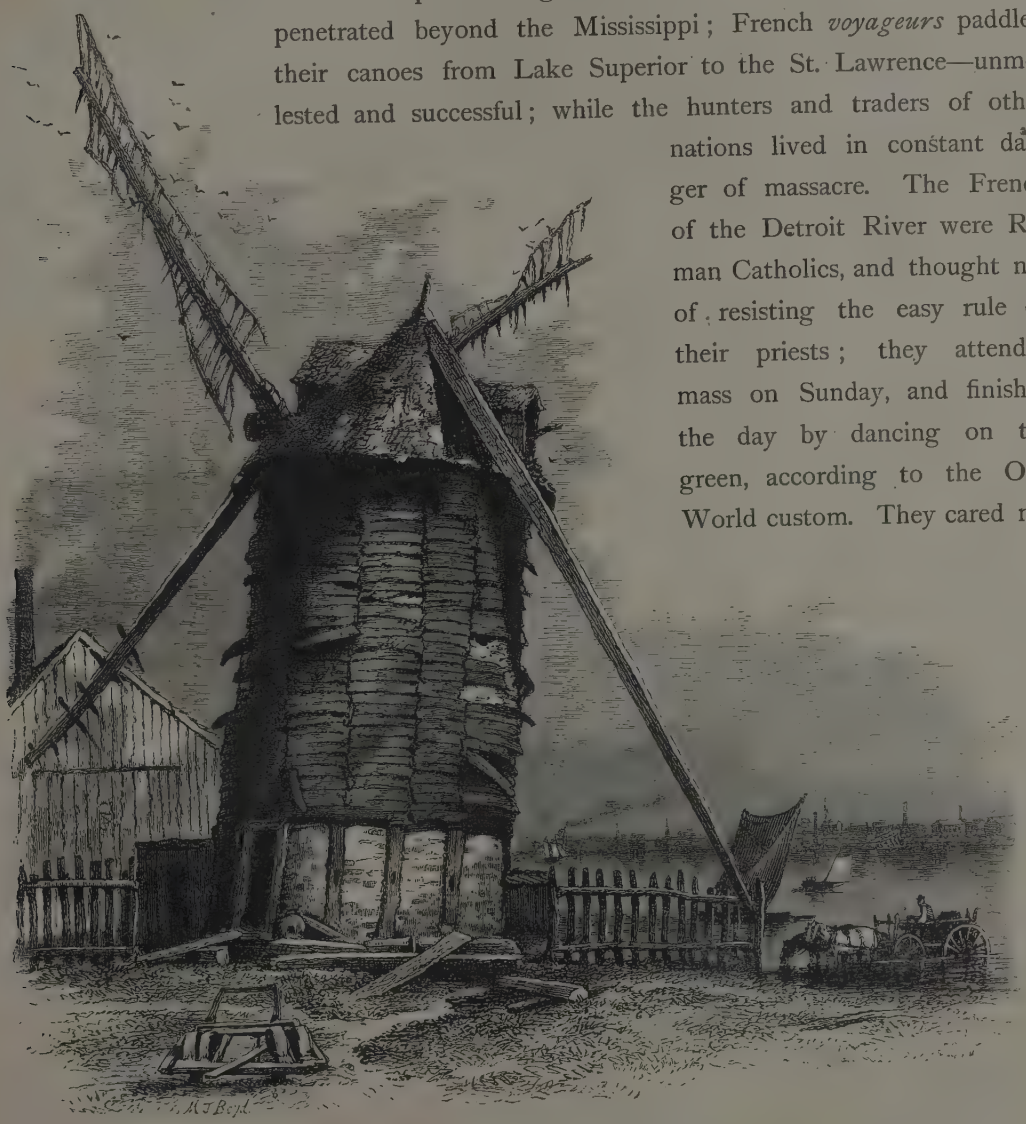
A few miles beyond Maumee Bay the coast turns sharply to the north; the Black Swamp is left in the southwest; and the boundary-line of Michigan is passed. The eastern end of Lake Erie slopes to a point at Buffalo, both shores coming toward each other, and making a natural gate-way for the Niagara River. But the western end is blunt and unyielding. The Detroit River has no gate-way; it comes unexpectedly into the lake from a broad shore; its mouth is clogged with islands; and there is nothing to indicate the entrance of a grand strait, which in its peculiar beauty has no peer throughout a chain that holds the Saut Ste. Marie, the St. Clair, the Niagara, and the St. Lawrence. The northward-sloping coast of Michigan—sixty miles in length, between



Toledo, Ohio.

the Ohio boundary and the city of Detroit—is a green, fertile shore, with numerous little rivers flowing through it, and a more gentle aspect than the north and south coast-lines of Ohio and Canada. This territory has had two distinct settlements—the French, which is ancient; and the American, which is comparatively modern. The French had here their little domiciles a century and a half ago, but it was not until 1830 that American emigration flowed freely into Michigan Territory; and Ohio had a settled population of New-England colonists, with their schools and churches, and had sent her pioneers into Indiana and Illinois, while the Detroit shore remained wholly French. The unextinguished Indian titles, the foreign ideas of the inhabitants, and the barrier of the Black Swamp lying in the way, kept the emigrants from this lovely land. In the mean time, the French settlers remained undisturbed in their little houses along the shore; for, according to a law of the *seigneurie*, each lot had a narrow water-front, and

could only extend a short distance back—a requirement which kept all the houses clinging on the bank, and gave the coast a settled appearance, although half a mile inland the primitive forest remained unbroken. From the river Raisin, which flows into Lake Erie near the present town of Monroe, as far north as Lake St. Clair, this line of French cabins extended. The people were a gay, contented race, raising the same little crops in the same little fields year after year, and grinding their Indian-corn and wheat in rude windmills, some of which are still to be seen on the shore. Alone of all the colonists of the New World, these Frenchmen readily assimilated themselves with the Indians; and, by adopting some of the forest customs, they lived in peaceful friendship with the very tribes whom the English and Americans regarded as treacherous and cruel. French traders established posts along the frontier; French *coureurs des bois* penetrated beyond the Mississippi; French *voyageurs* paddled their canoes from Lake Superior to the St. Lawrence—unmolested and successful; while the hunters and traders of other nations lived in constant danger of massacre. The French of the Detroit River were Roman Catholics, and thought not of resisting the easy rule of their priests; they attended mass on Sunday, and finished the day by dancing on the green, according to the Old-World custom. They cared not



Windmill, opposite Detroit.

Detroit River, from Fort Wayne (below the City).

to acquire land; they thought not of the future; they raised enough grain to support themselves from year to year, and no more. Indolent and improvident? Yes; but brave and generous as well. Give them their due. Every difficulty was referred to the commandant at Detroit, and his decision was final. At a later date, when the compact, white houses of New-England settlers began to appear among the French cabins, and when courts of the United States were established, much difficulty was experienced from these feudal customs. The French witnesses could speak no English; and, accustomed as they were to the plain "yes" and "no" of military rule, they could not understand the law's delays and finely-drawn lines, and in not a few instances they took to the law of steel and cudgel to defend their rights against the lawyers.

At Frenchtown, now Monroe, twenty-five miles above Toledo, occurred a bloody massacre of American soldiers, during the War of 1812.

There are fifteen isl-

ands within the first twelve miles of the Detroit River. Father Hennepin, who passed up the strait in 1679, enthusiastically writes: "The islands are the finest in the world; the strait is finer than Niagara; the banks are vast meadows; and the prospect is terminated with some hills crowned with vineyards, trees bearing good fruit, groves and forests so well disposed that one would think that Nature alone could not have made, without the help of art, so charming a prospect." The good father spoke but the truth. The river has neither foam, rapids, nor mountains; it has not that sweep to the sea, that incoming of the salt tide, which give to the ocean-rivers their majesty; yet it is a grand strait, full to the very brim of its green shores, calm, deep, and beautiful.

Three miles below Detroit stands Fort Wayne, the strongest military post on the lakes. Its guns command the channel.

The city of Detroit, with the exception of Mackinac, the first white settlement in the Northwest, was visited by the French in 1610. A permanent settlement was made there in 1701 by La Motte Cadillac, when a fort was built and named Pontchartrain, after the French colonial minister. Some years later a colony of French emigrants was sent out from France, who, mingling with the Indians, began that race of half-breeds whose history is indissolubly connected with the history of the fur-trade. A French military and trading post, Detroit was unlike the other lake-cities, and many of its original characteristics still appear—French names and customs, a deference to military rule, and a certain *insouciance*, which no New-England blood can acquire. Down the D'Etroit, or strait, in the early days, came twice a year the train of *bateaux* and canoes laden with furs from the far West and the Red River of the North. Then came days of gayety and dancing, music and drinking, ending with prayers and vows in the little church with two bells; and then adieu! and away they went again, leaving Detroit to another six months' quiet. In 1805 the old town was burned, and the new town which arose on the site was laid out with more regularity, but at the expense of its picturesque quaintness. The flag flying over it has been changed five times in the following order: French, British, American, British, American. And it has been the scene of one surrender, twelve massacres, and fifty battles. It is a veteran town compared to Cleveland and Buffalo. It was already a century old when they were born.

The central figure of Detroit history is Pontiac, the great Ottawa chieftain. He was the king of the river—the only Indian who, in the history of America, proved himself a match for the white man in far-reaching sagacity—the only Indian who succeeded in forming and maintaining powerful combinations among the discordant tribes. The masterpiece of Pontiac's life was a conspiracy to capture simultaneously on a fixed day all the British posts in the West, twelve garrisoned forts, extending from Niagara to Pittsburg, along the lake-shore, and on as far as the Mississippi. In such a wide field many tribes must act, and many clashing interests must be reconciled; and yet such was

GLANCE AT DETROIT FROM THE CITY HALL.

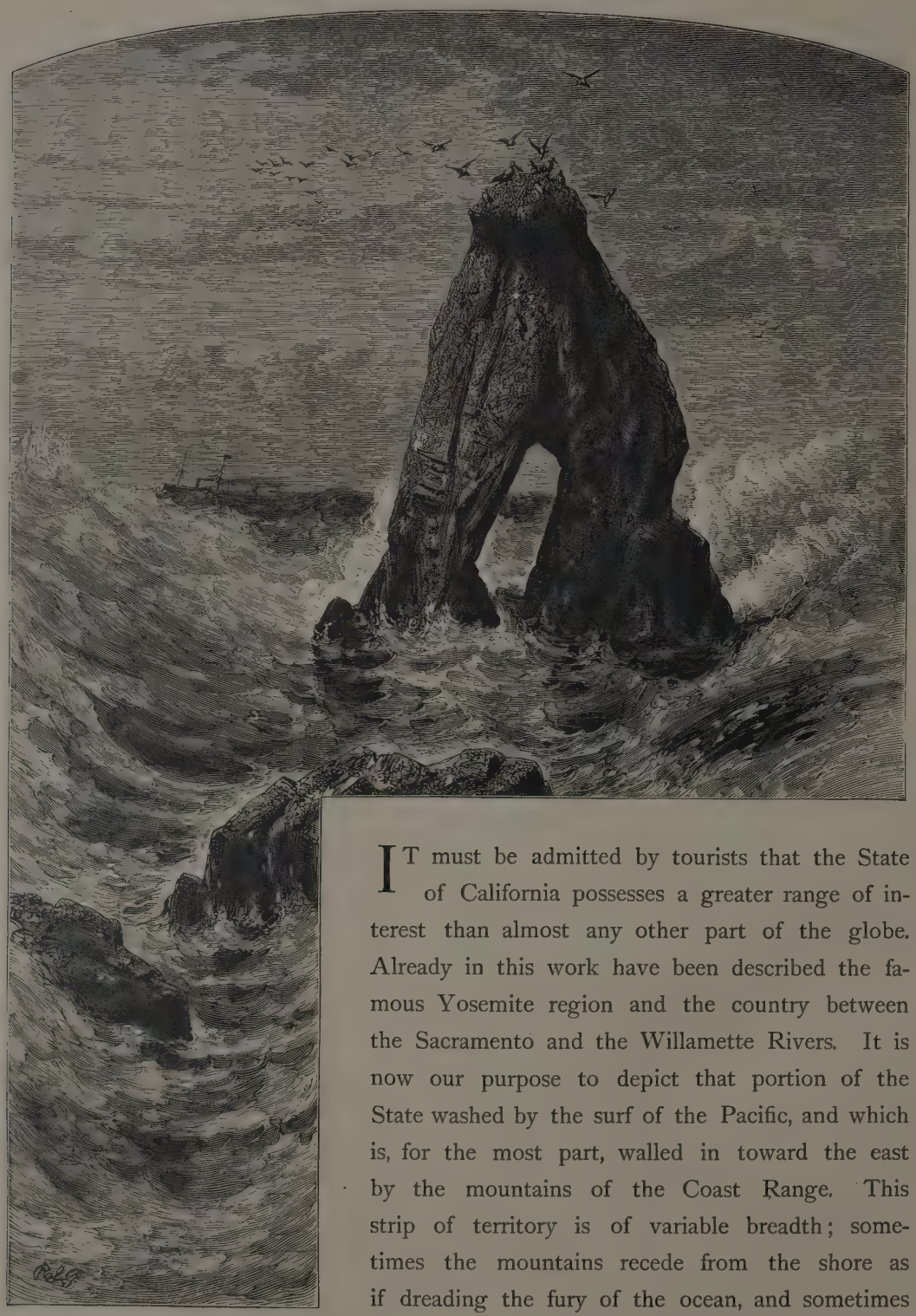
the personal influence of Pontiac that the plan was carried out: nine of the posts were taken upon the same day, and their garrisons massacred. Detroit made a successful resistance, owing to the warning of an Indian girl—the Pocahontas of the West. Pontiac, however, besieged the little town, and would have conquered it had not a letter arrived from the French commander-in-chief, stating that peace had been declared between Great Britain and France, and ordering an immediate cessation of hostilities.

Above the city the Detroit River curves to the eastward and enters Lake St. Clair. Here are long lines of lumber-barges with their tugs, schooners with their raking masts, leaning far over under a cloud of canvas, brigs with their high-lifted, aggressive sails, scows with their yellow wings spread widely to the breeze, and steamers coming up and passing them all in the evening race to the Flats, through whose narrow canal or tortuous channel one and all must pass before darkness comes, or lie at anchor until morning. On they sail through the golden afternoon—the red sunset and dusky twilight—and as they pass Fort Gratiot and enter the broad Lake Huron, night closes down on the dark water, lights are run up to the mast-heads of the steamers, the vessels twinkle in red and green, and Lake Erie, its scenery, history, and associations, vanish in dreams.

Detroit River, above the City.

ON THE COAST OF CALIFORNIA.

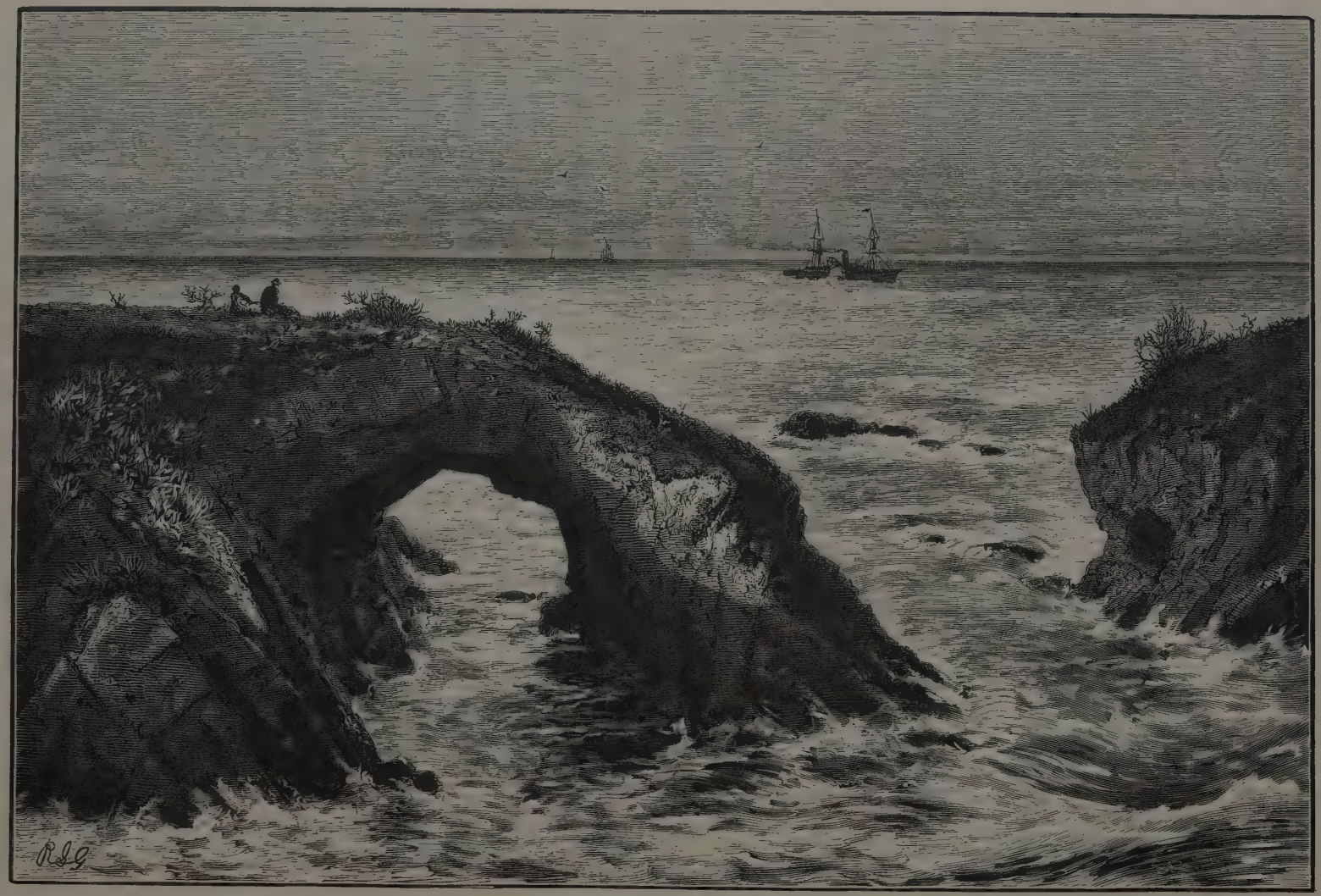
WITH ILLUSTRATIONS BY R. SWAIN GIFFORD.



IT must be admitted by tourists that the State of California possesses a greater range of interest than almost any other part of the globe. Already in this work have been described the famous Yosemite region and the country between the Sacramento and the Willamette Rivers. It is now our purpose to depict that portion of the State washed by the surf of the Pacific, and which is, for the most part, walled in toward the east by the mountains of the Coast Range. This strip of territory is of variable breadth; sometimes the mountains recede from the shore as if dreading the fury of the ocean, and sometimes

they press boldly to its very brink, and run out huge promontories far into the proper domains of the many-voiced deep. The vicinity of such places, for many miles, bears the impress of this eternal contest, in the shape of huge masses of basaltic and trap rocks, which have been torn apart by the waves, and which stand sometimes isolated, sometimes in groups in the midst of the waters. All along the coast-line, from Eureka, on Humboldt Bay, to Sonoma County, the shore is rendered interesting by these gigantic fragments, around which the wind howls with fruitless fury, and where the wild birds of the ocean congregate in myriads, deafening the tourist with their tumultuous cries. Interesting and peculiar as this region is, it has never been portrayed either by pen or pencil until the present time. The wonderful attractions of other portions of this favored State have formed grooves of travel from which it requires considerable effort to emerge. Nor can the writer conscientiously promise to the brave who venture to follow in this route the pleasant hotels and the agreeable accommodations which are to be found elsewhere. No—the coast counties north of the bay of San Francisco are the camping-ground of the Pike, and south of it the Greaser flourishes almost as freely as in the days before the conquest. The tide of immigration has set hitherto toward the mines or to the glorious valleys of the interior, rich with all the luxuriance of tropical climes. The Coast Range of mountains has cut off this part of California from observation and from settlement, and the fertile land is but little tilled. Here and there, no doubt, are fields of excellent wheat, and in favored spots are patches of the vegetables which the Missourians love, and orchards of fruit-trees, planted long, long ago by the *padres* in the mission days. But, for the most part, the face of the country is covered with herds of cattle and with droves of pigs.

The inhabitants of the coast are, for the most part, Missourians; but there is a lingering remnant of the Spaniard, and a trace of the Russian, dating back from the far-away times when the Russian Fur Company was established here, and was a power in the land. The means of travelling are twofold—the mud-wagon in summer and the stage in winter—the stage being of that ponderous variety known as the Concord. A pleasanter way than either is to go on horseback; and the mustangs, which, though small in size, are excellent, can be purchased for a moderate sum. The roads are not very good, it must be confessed; and there are bad bits, especially where the track winds round the base of a mountain. But they are good enough to the contented mind, and stage communication has never been interrupted. The tourist will find little scenery of sufficient grandeur to interest him until he approaches Cape Mendocino. Here the mountains, which previously were low down upon the line of the horizon, come right up to the sea. After crossing the Eel River, a stream of considerable magnitude, the road winds along the skirts of Mount Pierce, a huge mountain, which terminates a long range of high hills, running parallel to and not far from the sea-coast. The sides of Mount Pierce are positively covered with the famous red-wood; and the eye ranges



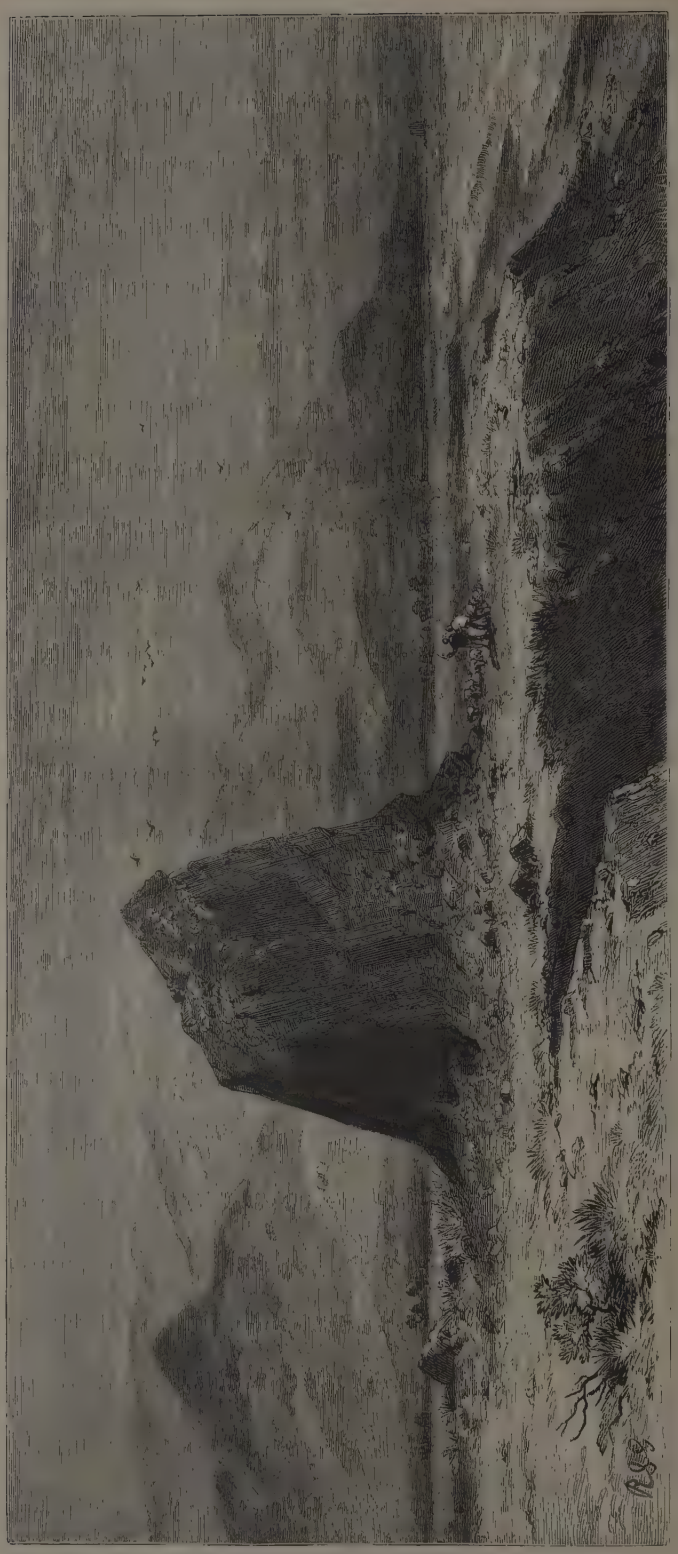
COAST OF MENDOCINO.

over miles and miles of this magnificent tree without detecting any other kind. Some of these are no less than three hundred feet high and twelve feet in diameter, and the magnificence of these mountain-forests can well be imagined. In the early morning, as the mud-wagon painfully climbs up the foot-hills, the eye delightedly watches the mist slowly departing from the tall tops of these giants. A thick veil lies upon the cliffs and the sea, also unillumined by the sun. To the left, however, slanting arrows of red light come up beside the crags and fall upon the columnar trunks of the red-woods. The deep-green leaves seem gilded at the edges, and the bark of cinnamon-color glows under the red rays. Above, half-way up the trees, there is a point where the early sunlight and the mist are at strife. At this place the mist wreathes and circles about under the influence of the sun, and this movement communicates itself slowly, very slowly, to the deep bank of mist above, where the grays are pure, and have no contact with the glowing arrows of Phœbus Apollo. The sky above is wonderfully clear, tinged a little with saffron back of the mountain, and a few stars tremble lazily over the deep, dark pall of gray fog that overhangs the ocean. We can hear the slow, solemn pulsing of the waves and the roar of the breakers as they beat upon the rocks. A few light, wandering *cirri* suddenly become visible overhead, a tongue of fire licks the topmost crag of Mount Pierce, and warms its barrenness. The cloudlets become a pale red, the mist upon the trees creeps up higher, and more and more of the dense foliage becomes visible. In five minutes, while we are gazing at the light moving upon the crags of the mountain-side, and the mist departing from the red-woods upon its broad flanks, all, all has become clear; and seaward the eyes are charmed with such a bit of rugged grandeur as the artist has depicted. The cliffs are not high, but along them are the fragments that the sea in its fury has overwhelmed after centuries of never-ending warfare. In a kind of inlet, standing like the monument of some great one in a market-place, is an isolated rock of fantastic shape. It is of basalt, seamed and scarred very strangely. The sea has worn a passage through the base, through which the waters plash and rage unceasingly. The height of the arch thus made gives us an idea of the fury of the storms that have beat upon this tower of the sea-birds. If this did not exist, we might infer it from the difference of color in the rock. Above, the tones are pure gray; but below, where the tempest reaches, of a dark-brown. The crest is of a dazzling white, from the guano of the wild-fowl that inhabit there, and breed and bring up their young. In the early morning they are silent until the mist has lifted; then one starts up, and he goes circling round the cliff, pouring out harsh and discordant cries, then another joins in, and another, until all the adult birds are on the wing, and the rock is left in possession of the young ones, that scream for food as long as they can see a single bird in the air. In a few minutes, of all the thousands of birds that were circling about, not half a dozen are in sight. All have gone a-fishing in such places as they are acquainted with; and, if one might linger, doubtless he

SCENE AT THE MOUTH OF RUSSIAN RIVER.

would see the birds return one by one with food for their young ones. Among the inhabitants of such rocks the pelican, the cormorant, and the large kind of sea-gull, are the most conspicuous, but occasionally there is a fowl called the murre, whose eggs are considered a great delicacy, and are sold by hundreds of thousands.

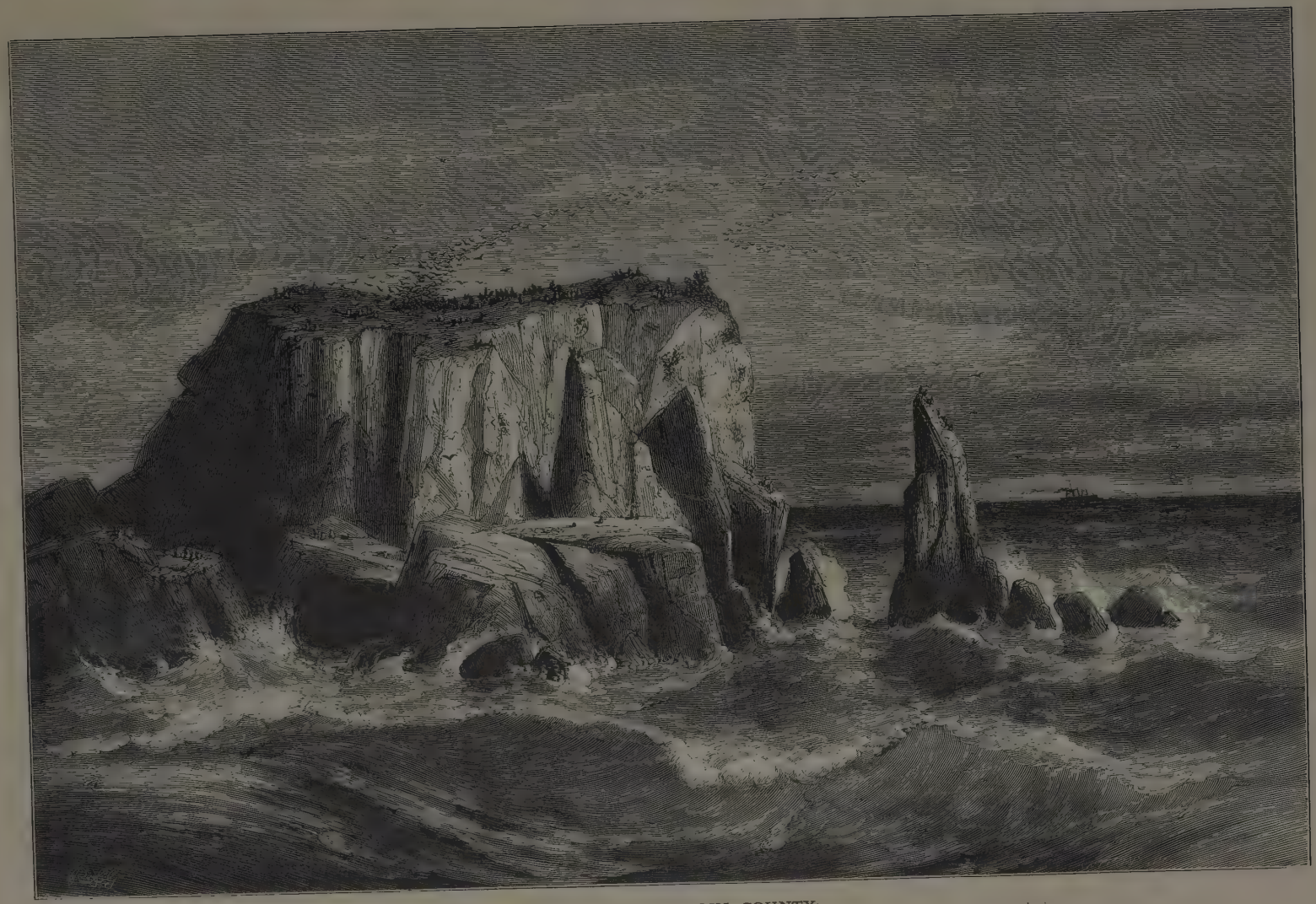
Nothing can be more tumultuous or less pacific than the waters of the Pacific Ocean along the Mendocino coast. Where there is a sandy beach, which is not often, it is pleasant to watch the incoming waves, and to compare them with those of the Atlantic. We at once perceive that there is a considerable difference. In the Atlantic the surf is seldom more than six feet high, and the serried line of waters that comes dashing onward is rarely more than two hundred yards long. In fact, gazing at the sea that breaks upon the Long-Branch shore, or upon the sands of Cape May, or upon the western side of Martha's Vineyard, or upon the petrified beach of Santo Domingo, one can see without difficulty ten or a dozen waves breaking on the shore or advancing in line, all within the field of vision afforded by one glance. It is not so here. The waves, in the first place, are not so frequent. Accustomed to the Atlantic quick pulsation, the traveller waits with impatience, even with a degree of pain, for the roar of the breakers on the Pacific coast, and has about concluded that the sea has given the thing up as a bad job, when the tremendous boom bursts suddenly and unexpectedly upon his ear. Then the waves are twelve feet high and a mile in length, and advance with a solemnity of motion which words cannot describe. The curves described by the falling crests of such waves are infinitely finer than any thing which the Atlantic presents; and the boiling fury with which they crash upon the beach and churn the sands is, at first sight, appalling. Around such isolated rocks as those presented by the artist they rage and raven, like the dogs which the poets fabled around Scylla. All along the Mendocino coast they have worn the cliffs into strange and wondrous forms, beating out caverns where the lower part is conglomerate rock, and series of arched cellars, into which tuns of sea-weed and *débris* are thrown. The basalt, which is the leading character of the crust, is not uniform in texture, some parts being very much softer than others. Wherever this occurs in the proximity of the waters, they have invariably scooped out the soft rock, making all kinds of mystic arches, siren rings, and gateways of Poseidon. This is not infrequent, and occasionally happens in spots accessible to the human foot, sometimes even in close neighborhood to the stage-road. The surface is covered with a rank, coarse grass, which even mules disdain, and which the wandering goat will not even look at. Sometimes a cactus will bloom along the cliffs, and there is a species of thistle, with very handsome bluish-green leaves and a large yellow flower. If a traveller wants to get out and smoke a pipe in contemplative mood, reclining on the cliffs and listening to the strange gurgling of the sea pouring through the passages, the drivers of the wagons are most obliging, and never fail to stop. Truth to tell, they are not often asked, for the population consists of those who



Basaltic Formation near Russian River.

care more for hog and hominy than for the strangest sight that ever Mother Nature wrought.

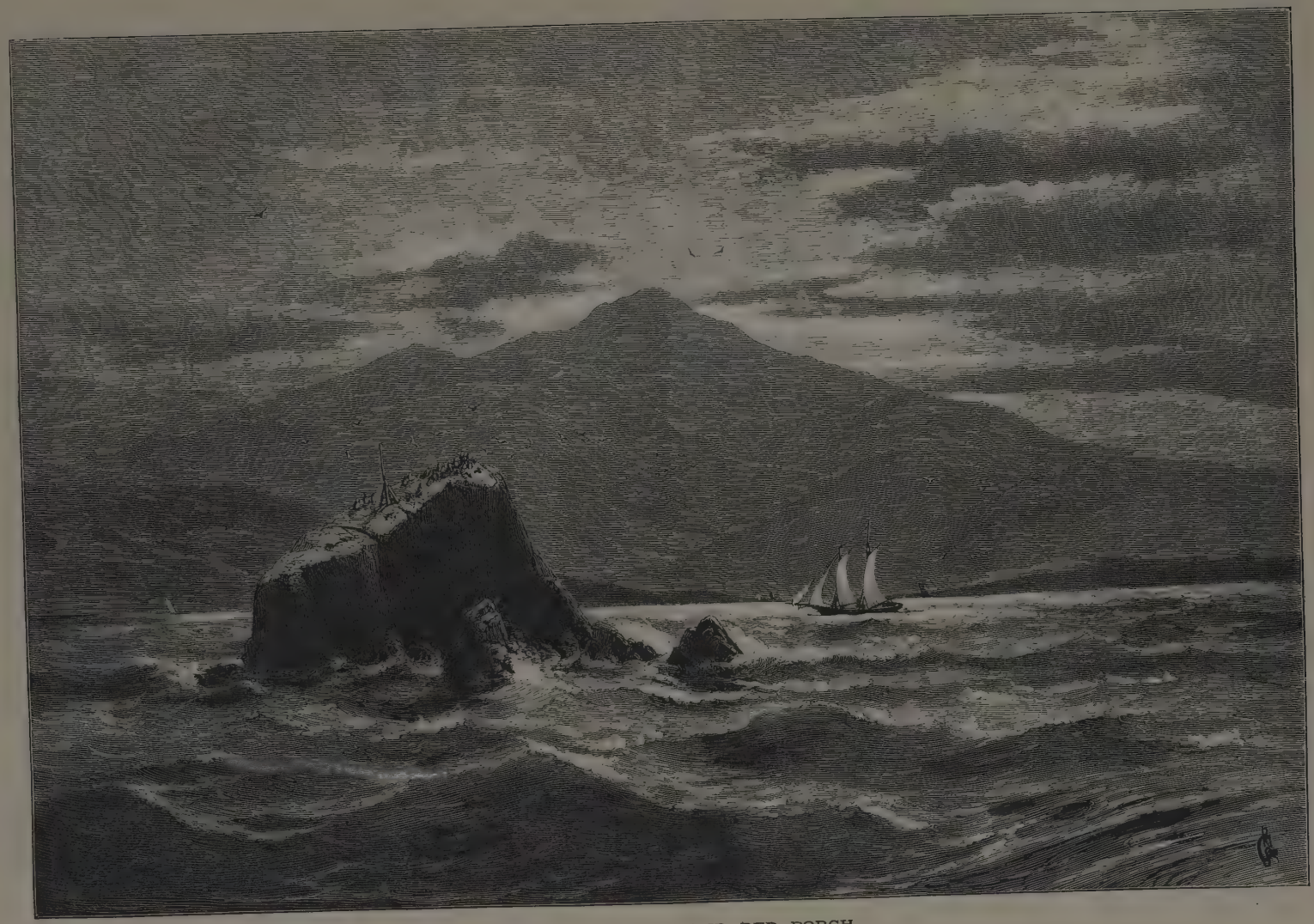
The hotels along the line are few in number, but there are plenty of saw-mills, where one can obtain fair accommodations. At Mendocino City it is advisable to halt for a few days and rest. The road has been all the way through mountains, and continues to be, though back of the hills that hem in this city there is a superb stretch of level country, known as the Long Valley, which is watered by the main fork of the Eel River, which is crossed the first day after leaving Eureka. The mountains press closer and closer to the sea until we arrive at the mouth of Russian River, south of which the Russian Fur Company had its station. This is not a very large stream, and is only navigable for about twelve miles from its mouth; but there are many saw-mills on its banks, and Bodega, the nearest town, does quite a lumber-business. The entrance to the mouth of Russian River is quite picturesque. There are numbers of schooners and sloops laden with red-wood, some going north, to Portland



COAST SCENE, MARIN COUNTY.

—others south, to San Francisco, Monterey, and as far down as the Isthmus. The northern side of the little bay is very bold. The promontory is of the most striking character, coming down from the mountain-peak in a succession of grand, sweeping terraces, some of the descents being so scarped as to suggest the idea of Titanic fortifications. On the flanks there is the inevitable red-wood forest, which, in places, ascends almost to the summit. In other places the mountain is bare and rugged, showing huge masses of grayish granite verging on purple. The cliffs at the extremity of the promontory have been torn and rent by some dreadful convulsion until they are almost separated from the main-land. And their jagged summit bears a quaint resemblance to the spires and minarets of a cathedral. At the entrance to the mouth of the river are huge detached cliffs of basalt, which form two groups, called by the boatmen the Brothers and Sisters, though the same name is applied to other cliffs down the coast. The slopes near the sea are denuded of timber, and, being covered with a short, sweet grass, afford excellent pasturage to a fine breed of sheep, for which this part of the country is noted. On the southern side of the mouth of Russian River there are broad sweeps of fine pasturage, from which, however, the basalt crops up occasionally in isolated peaks, like the castles of the robber-knights who lived along the Scottish borders in the olden time. They are inaccessible, which the birds seem to comprehend, for they inhabit here, and breed with as much freedom as on the sea-girt cliffs that stud the shore. This peculiar formation—shown in the engraving—is more than three hundred feet high, and affords a pleasant shadow in the hot noons for the flocks of sheep and their shepherds. It is nearly square, and the sides are so steep that no one has ever succeeded in climbing, though many have tried. Beyond the sweeps of pasturage the hills come down again and renew their struggle with the sea. It seems as if there had been a mutual understanding and a truce to allow the beautiful young river to join herself to the sea, and the plains ever her attendants. Then the truce is broken, and the old warfare recommences, for the mountains come down with greater determination than ever, and, at Bodega Head, rush far into the sea, as if in contumely and derision of the sea-born powers.

The town of Bodega was formerly the Russian station, and in the vicinity there are still the frail and fading remains of a stockade and fort, with an old church, built in 1787. Many of the names in Bodega are Russian, and one sees on the signs Ivanivitch, *carpintero;* Vassilivitch, *panadero* — Spanish being the language of the place. There is an old Spanish hotel, built of adobe, in the regular Spanish style, with a garden attached. This in former days used to be filled with flowers, but is now occupied by vines. The native wine is called white Sonoma, and is excellent, but is not much patronized by the populace, who are rapidly becoming Americanized. Their teachers being Pikes, as the Missourians are called, whiskey made from corn or wheat is the great beverage. From the same cause it happens that, though there are plentiful flocks

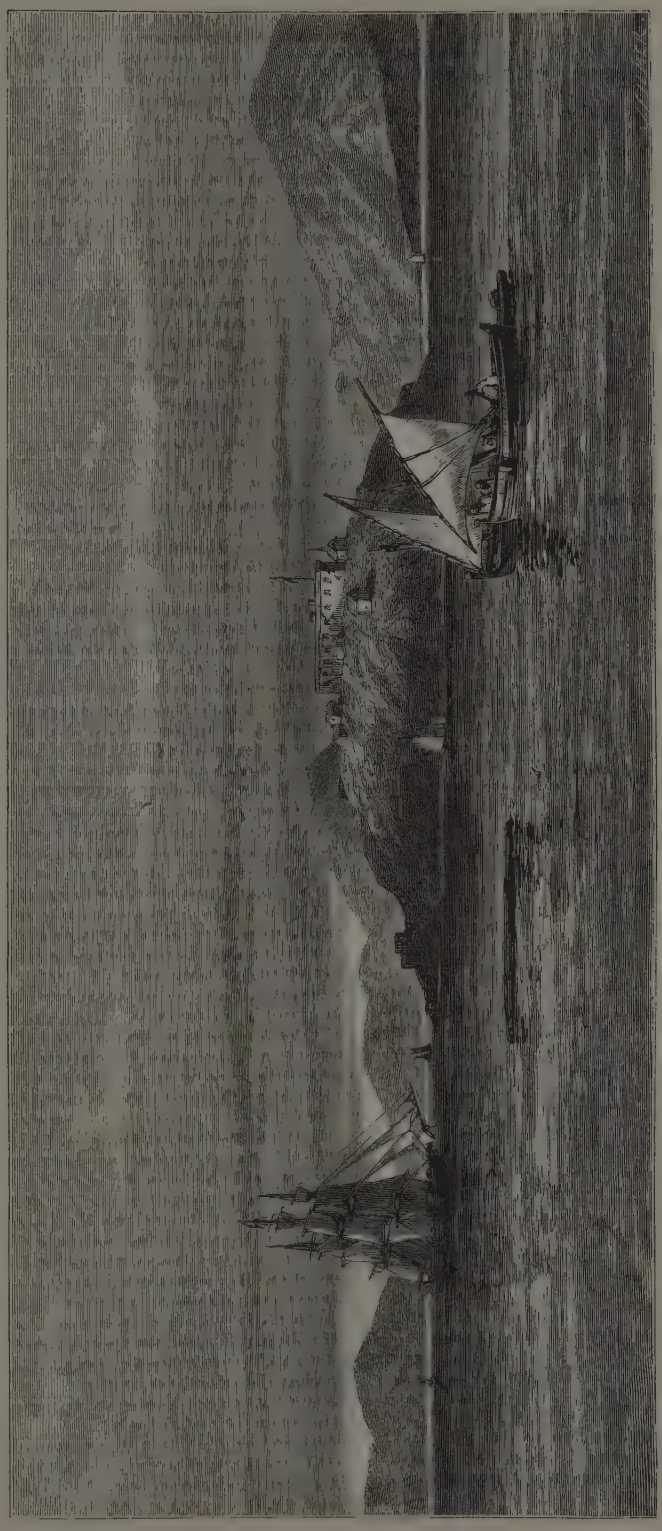


MOUNT TAMALPAIS AND RED PORCH.

of sheep and herds of cattle, one can hardly get any meat save pork. There is abundance of good ham and bacon, eggs are plentiful, and the bread is of most admirable quality. Bodega is by no means a bad place; for the ground is very fertile, and there is excellent grazing all about. Pears and apples of the finest quality are grown in such abundance that two-thirds fall on the ground, and the pigs are driven in to feed on them. Besides the white Sonoma there is a black grape, which is of excellent quality as an eating-grape. Vegetables also grow superbly, and corn is produced as excellent as in Illinois or Ohio. After the toilsome journeying through the mountains, which is sufficiently fatiguing, whether by wagon or on horseback, a few days' halt in Bodega comes very agreeably. There is much to be seen also. Many of the houses are of the old Spanish construction, with, perhaps, romantic histories. The old stockade-fort, Ross, situated on a plateau near the cliffs, is well worthy of examination, and the old Greek Church, with its miniature spires of red-wood, and their gilded tops, is a curious relic of a past so absolutely gone that very few are aware now that it ever existed. From Bodega a capital, fast-going stage runs to Petaluma, which is only forty-six miles from San Francisco. It is situated upon Petaluma Creek, at the head of San Pablo Bay, and steamers run every day from it to San Francisco. But, for the tourist who wishes to see the coast, this route is inadmissible, since it is a diversion inland, and a turning one's back upon the scenery and the difficulties of the shore-line. A stage will take him to the town of Two Rocks, which derives its name from the configuration of the coast. One of these rocks is given by the engraving. The height is about two hundred and sixty feet, but the mass is enormous. Detached rocks, like needles worn to a point by the eternal blustering of the winds and waves, surround it on every side like small diamonds around a Koh-i-noor, and on the flanks there are broad, flat masses, which are the favorite resorts of seals. Here the soft-eyed wretches, so persecuted for their exquisite skins, sun themselves in comparative security; for, though not protected by law, as at San Francisco, yet the influence of that law is felt here in Two Rocks, and there is a moral feeling against disturbing their repose. The innumerable birds that make their nests upon the broad, flat summits of these rocks are not so kindly treated, being robbed at regular intervals by an egg company formed for that purpose. Wild and precipitous as these rocks appear, they can be scaled without difficulty, and the time will inevitably come when the birds will learn to avoid the place, and these rocks will lose their chief attraction—their chief attraction, it must be understood, for the multitude.

For the lover of natural scenery, these enormous, isolated rocks have a grand fascination, to which the birds contribute nothing. The grayish tones of the upper part, melting into the deepest brown, with the glowing white of the summit produced by guano, and the broad yellow of the withered grasses, delight the artistic eye. The shadows vary from pale violet to deep purple, according to the hues of the lights. The

lines are also most picturesque, Nature having contrasted all varieties of lines — perpendiculars, diagonals, horizontals, vanishing curves in the rocks; while below, in the swash and foaming of the tumultuous seas, there are other curves of a totally diverse character, and other tones, which contrast strangely with the colors of the rocks. The seas are deep-green, like emerald, or muddy-green, like *aqua-marina*, according to depth and other conditions; and there is great variety, also, in the white tints of the foaming crests, according to their volume. The sky above is not a very deep blue. It is a softer, milder cerulean than that which arches over our heads in New York and New England; it is not so splendid, but it is more tender, and seems to fill the soul with fonder, gentler feelings. The clouds are mostly *stratus* and *cirri*, and lie low on the horizon, or fleck the sky with golden fragments, like the sheep of some celestial shepherd. If you look at the sky, your heart becomes melted within you; if you look at the sea thundering on these Two



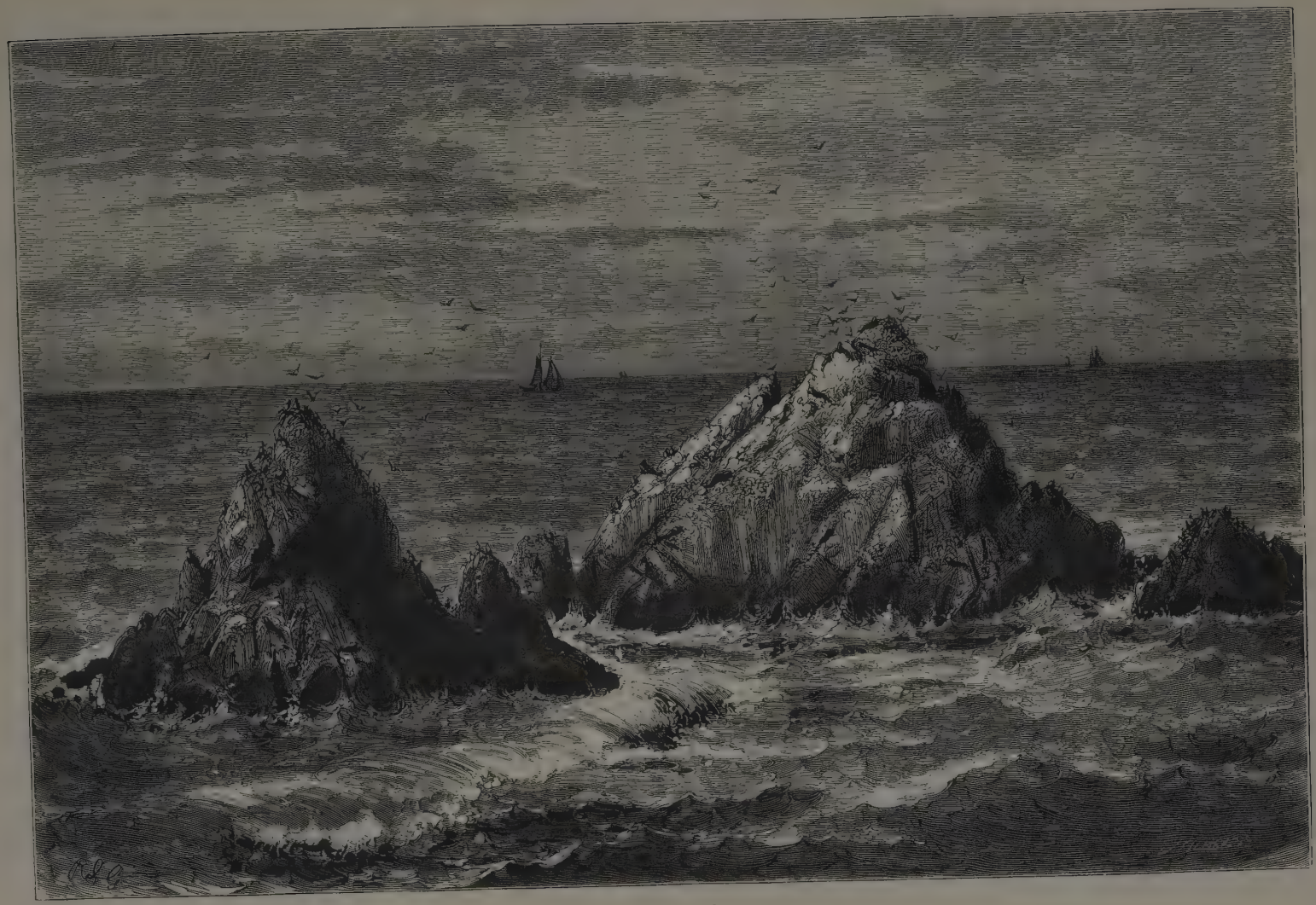
Alcatraz Island.

Rocks, and watch the great swathes of glittering-green water come rolling on to burst and be shattered in mid-career upon these castles of the sea-birds, straightway your soul is filled with ideas of the delights of battle, the fierce joys of hand-to-hand combat, and the stern music of ringing swords. Get, if you can, upon a level with the water, and catch the color of the tips of the waves when they are raised up heavenward, and are between your eyes and the sky; then you will forget the ideas of battle, and you will cease to hear the thundering strokes of the waves upon the sea-walls of the rocks, and you will live only in color. For the moment, whether you have ever handled a brush or not, you will be a painter, and you will know all the glories of color, and you will find the tears welling from your eyes, and will comprehend the inspired madness of Turner and the heroics of Ruskin. It is not that these things cannot be seen everywhere, for they can, but here the type is on so large a scale that he must be trebly blind who cannot read the book of Nature, and glory in the mystic revelations of her talisman. This is why the West is breeding our poets; for, as they stand and gaze with the eyes of understanding, the rhythm and the word are revealed, and the song has found the lips that shall utter it.

Persisting in our resolution not to be diverted from the coast, we must, now that we have arrived in Marin County, take a schooner from the pretty little harbor of Oloma, only fifteen miles from San Francisco, and enter the famous bay in this way rather than yield to the seduction of stages, railways, and internal navigation. As we approach the entrance, the hills on the left loom up through the deep haze like giants, and are, indeed, more than two thousand feet high. To the right, they are by no means so lofty. As the mist clears off, they are bare and sandy, and are not very picturesque, though on the left the peak of Tamulpais shows grandly. The view opens, and the splendid straits called the Golden Gate appear. Through them we can see the island-rock of Alcatraz, with its fortifications gleaming in the distance. The enormous mass of Tamulpais, which showed at first boldly in our front, seems still behind Alcatraz. Between the last and the shore is Angeles Island, very high, and covered with rich green vegetation. Goat Island, with its fort, is on the left of Alcatraz. To our right hand is Fort Point, where the United States flag floats, and, a little beyond it, the old Presidio. Beyond is the city—the glorious city that leaped full-born into existence. It rises up with numberless towers and spires, and great warehouses, as the schooner, with her sails filled to bursting with the fresh sea-breeze, staggers on. Little craft and big craft, steamers from the ocean, tugs, and every variety of floating thing, are spread upon the gleaming waters, whose green waves dash into white foam upon the three islands ahead. Beyond the city, one can catch momentary glimpses of shipping, which grow fuller and fuller until we get abreast of Alcatraz, when all the glory of the bay bursts upon the sight. Far on the other side are Benicia and the glittering waves of Carquinez Straits. Beyond we catch a glimpse of the peak of Monte Diablo, at the base of which seems to crouch the

THE "CLIFF HOUSE."

town of Oakland, though it is really a very large place. But the air is so pure, so serene, that one can see the scarred ravines on the sides very far, and we almost think we can see Stockton. It is not from the bay itself, however, that the finest view can be obtained. From the schooner's deck one can indeed obtain glimpses, but the whole can only be seen from the shore. To survey all the beauty of the Golden Gate it is necessary to climb Telegraph Hill, which is to the westward of the city. From that elevated position, with roofs and buildings lying peacefully below one's feet, and stretching far out to one's right hand, the prospect of the Golden Gate is, indeed, exceedingly beautiful. The portals of the "Gate" seem but a mile apart, and, through the mist that hangs upon the farther side, the giant Tamulpais looms with tremendous force, like some Titan sentinel guarding the approach of a new Hesperides. The steamers, with their crowds of passengers swarming along the bulwarks, move majestically through the heaving tide, which makes the white-sailed schooners dance, and rocks the three-masted merchantmen that have traversed wild wastes of water around Cape Horn. The islands show plainly, and the fortifications gleam brightly, under the full glare of the sun. Spite of the mist that lingers along the bold cliffs opposite the vision commands a far stretch of landscape, and deserves the position which our eager friends of San Francisco have accorded to it. To them it is the lion of the place; and the first thing which the citizen recommends to the stranger within his gates is to take a look at the Golden Gate from Telegraph Hill. This view we illustrate with a steel engraving, from a drawing by Mr. James D. Smillie. But to the inhabitants themselves there is no pleasure equal to the drive through the sand-hills, over a fine, hard road, to the Cliff House. This is emphatically the most picturesque part of San Francisco, both in its surroundings and in its seal-cliffs, where the sea-lions bark and whine and roar, with none to make them afraid. The distance from the city is about five miles; and there is little to be seen on either side of natural beauty, though there are parks and cemeteries and gardens of extreme loveliness. Nature has furnished only sand-hills, which seem to be half firm, like sandstone, half crumbling. But the Cliff House is built, as its name imports, upon frowning basalt; and the road that winds from it to the ocean hence has been cut through solid rock. The bluff of the hotel is about one hundred and thirty feet in perpendicular height, of a gray color, verging into the deepest brown. Detached bowlders lie at its base, and are tormented by the fierce rollers. Beyond, at some distance, are the cliffs where the sea-lions congregate. Truly, their bark is worse than their bite. They occasionally get up a little altercation, and roar tremendously; but they are a placable people, and their contests are not alarming. Strangers sit on the esplanade in front of the Cliff House, and watch them by the hour through their opera-glasses. There is one big, burly fellow, the largest of all, who roars ten times more than any other, and of whom all the others are afraid, who climbs to the top of the cliff, and suns himself comfortably all day. No one attempts to take his place; and, when he descends, pad-



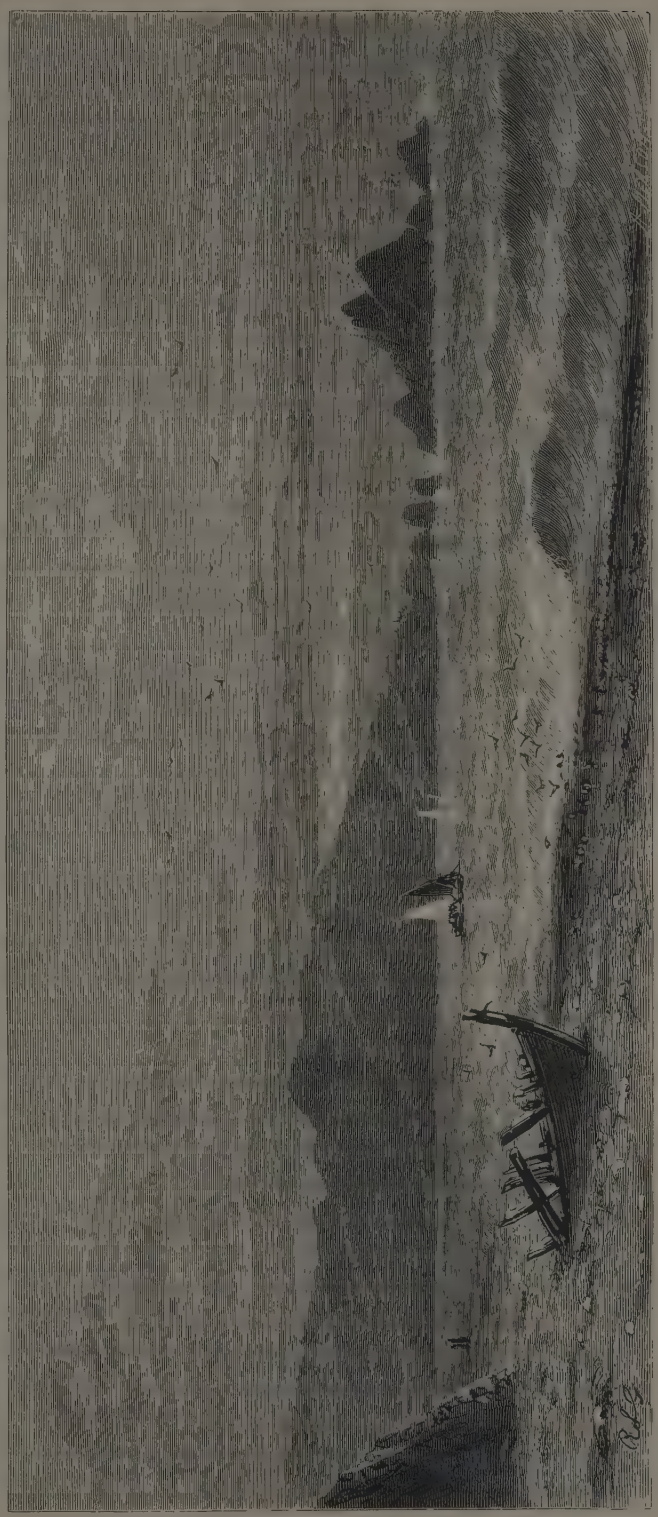
SEAL ROCKS.

dling in the awkward manner of the phocine tribe with his flappers, the others respectfully get out of his way.

The seals seem to appreciate their perfect security, and congregate in hundreds on these cliffs. The females suckle their young ones, and the males catch fish and sun themselves, as if they were in the middle of the ocean, where no eye of cruel man could see their glistening skins, and begin to calculate what they would fetch in the New-York market. Little touches of sympathy with universal Nature, such as this, are truer subjects whereon to claim American superiority than all the inventions with which the Yankees have blessed the world. To delight in the happiness of human beings is much; but to extend the circle, and to delight in the happiness of inferior animals, is more, especially when you could get a good round sum by killing them.

From the Cliff House, a road has been cut through the basalt for some distance, and is succeeded by a fine, sandy strand. About five miles from the first-named hotel there is another, named the Ocean House, which, if it has no attractions in the way of sea-lions, has much to recommend it in the scenery by which it is surrounded. Here, indeed, is one of the stretches of ground where one can see the Pacific Ocean roll in with uninterrupted grandeur. Nothing can be conceived more majestic than this sight, especially in that part of the strand which gives a fair view of Point San Pedro. The length of the wave-walls is fully a mile, and the height of the rollers twelve feet. The enormous mass of water comes onward with a solemn grandeur which appalls. There is no hesitation, no tremor, along the whole line; and it looks like the charge of an army of cavaliers galloping with perfect regularity and even line upon the foe. Solemnly it advances, with the crest just flecked with foam; and every thing seems hushed, as if in expectation of the onset. Suddenly, as it nears the shore, there is a trembling all along the mile of sea, and the crests begin to curve slightly over. The line halts; the crests curve more and more; and suddenly the immense length pours down like a cataract upon the shore, pounding the sand as if with so many trip-hammers. Every thing has a throb; the solid earth seems to tremble, and the great rocks to oscillate. The white rime that was poured over the strand rushes back with incredible velocity. He were a bold swimmer who could fight through that undertow. As it rushes back it meets another oncoming wave, and, striking its base, hurtles it down with crashing fury; and then there is a hush. The sea is silent. The birds and the insects, taking courage, begin to sing and to chirp until there comes another solemn booming, and the roar of another broken, rolling wave. And this eternal symphony takes place in a kind of bay, where the mountains, rushing to battle with the sea, have advanced far into the waters, and their outposts have been terribly mangled. The great promontory has been severed from the mountain; and between them are three square, isolated crags, with shallow water around them. Here the sea rages and bellows like a wild thing; and the waters seem to lose themselves in eddies and whirlpools, and to be unable to find

their way back to the sea, so that they might charge in line with the great, solemn rollers. The old promontory, now become an isolated crag, is covered with sea-birds, and its top is already white with their guano, although it could hardly have been separated from the main-land for more than a few hundred years. Seals sometimes come here, but not very often, as they are not protected. On the beach there are few shells, but there is an abundance of the broad, ribbon-like sea-weed which is gathered on the coasts of Ireland and Scotland, and burned for kelp. Blocks of granite show themselves occasionally peeping up from the sand, and probably are bowlders deposited there in by-gone ages, which the sands have covered. The sea is diversified with the sails of fishing-boats, for fish are abundant in these waters, and the birds are busy all day long in the neighborhood of their stronghold.



Point San Pedro, near San Francisco.

It is difficult to say at what time of year this view is most beautiful. In the summer the winds rage with more intensity than in the

winter, and the clouds assume fantastic forms, which combine with the raging of the sea to make most exquisite and forcible pictures. But in the winter, when the breezes blow from the southwest, though the fury of the great rollers is mitigated, and the bursting of the breakers less formidable, there is an added charm in the soft, misty haze which dwells upon the mountains, which to many seems preferable. For under this influence the Coast Range, which pours down its lines of rugged peaks at Point San Pedro into the midst of the wild waves, has a strangely soft and tender aspect. The impression which the ranges of crags make upon the spectator is no longer one of barren, savage desolation. The haze envelops them in tender tones, and gives to their coldness a warmth which, in truth, is not their own, and is calculated to deceive. But to the painter's eye how exquisite is the gradation of those warm and softened gray hues which seem not very distant, low down at the horizon, and melt by almost imperceptible degrees into the clear air, showing lines which are faintly traced and yet distinct!

The coast south as far as Monterey offers few specialties of picturesque beauty, being mostly foot-hills covered with pine-trees, and mountains of small height and monotonous outline behind them. There are few bold headlands, the land sloping, for the most part, with a gentle declivity toward the sea.

END OF VOLUME FIRST.

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